

**Clustering, Segregation and the 'Ghetto': the spatialisation of
Jewish settlement in Manchester and Leeds in the 19th century**

**by
Laura Sophia Vaughan**

**A thesis submitted for the degree of Ph.D. Architecture
at the University of London**

25 March 1999

**Bartlett School of Graduate Studies
University College London**

ghetto n., pl. -tos or -toes.

1. Sociol. a densely populated slum area of a city inhabited by a socially and economically deprived minority.
2. an area in a European city in which Jews were formerly required to live.
3. a group or class of people that is segregated in some way.¹

¹Makins, M. and Isaacs, Alan et al (1994) Collins English Dictionary, Harper Collins, Glasgow.

Abstract

This thesis deals with the urban phenomenon of minority clusters, which are invariably referred to as 'ghettos'. A review of the literature on 'ghettos' suggests that the clustering of identifiable minorities is commonly associated with segregation - be it physical, economic, social or linguistic - although it is the physical segregation which tends to be most frequently noticed. Moreover, one type of segregation, such as physical - is believed to lead to another type, such as economic. Through studying Jewish settlement in Leeds and Manchester in the 19th century, two key questions are addressed in this thesis: The first is whether there is a link between spatial clustering and spatial segregation and the second is whether spatial clustering is linked to other forms of segregation, such as economic, occupational and social. Another two questions arise from the analysis: whether Jewish settlement patterns are distinctive in their own right, and whether it is possible to identify a pattern in the process of formation of Jewish settlement that may have broader implications for immigrant/minority settlement in general.

The techniques and theories of 'Space Syntax' are used here to analyse the settlements in question by using detailed street-level mapping of census data on the entire Jewish population of Manchester and Leeds and of all non-Jewish individuals in the key Jewish districts of each of the cities (the key Jewish districts are generally referred to as 'ghettos'). This enables a multi-level socio-spatial comparison to be made: between Jewish families and their immediate neighbours; between Jewish families and the population of the city as a whole; and between the initial and secondary stages of Jewish settlement. In order to investigate questions relating specifically to immigrant settlement, non-Jewish people born outside of Britain are also considered as a separate group, although they are not the main subject.

The analysis suggests that spatial clustering does not necessarily lead to spatial segregation and that spatial clustering may be associated with some types of segregation, such as occupational but not with others, such as economic. It also suggests that Jewish settlement patterns are distinctive and that they are identifiable for a longer period than expected after immigration, when compared with other immigrants. This thesis also sheds light on the process of the formation of Jewish settlement, proposing a pattern whereby after establishing a core of settlement, streets already established become more densely populated, whilst new streets are settled more slowly. Analysis of the key districts of Jewish settlement also suggests that certain areas of cities are especially prone to settlement by the disadvantaged, due to characteristics that make such areas firstly, tend to be economically unsuccessful due to their spatial segregation and secondly, less attractive to those who have the means to move elsewhere and that such areas are not so much defined by their immigrant constituents, but by their long-standing inhabitants that cannot move elsewhere.

Acknowledgements

I would first like to thank the Engineering and Physical Sciences Research Council, who provided me with financial support for the past three years in the form of a PhD Studentship.

The analytical chapters of this thesis use census data on the Jews of Manchester and Leeds collected and collated by Bill Williams and Murray Freedman. I am very grateful to Mr. Williams and his assistant on his research, Mrs. Roz Livshin, for their making the fruits of their labours available at no cost and for their assistance to me in explaining the background to their work. I am equally indebted to Mr. Freedman for his permitting me to make use of his data - which are the result of great labours on his part - for no charge. The scope and manner of application of these data are described in chapter 3 of this thesis. The other principal source of data used here is the Census Enumerators' Books of the 1881 Census for Great Britain, computerised by the Genealogical Society of Utah, Federation of Family History Societies and reformatted by The Data Archive, University of Essex. I acknowledge the use of this data-set in my work. I would like to express my gratitude to the Data Archive, who processed the files for Manchester and Leeds out of sequence in order to assist me in completing my work on time.

As well as Mr Williams and Mr Freedman, almost every person I approached for assistance in my research offered me their time and knowledge with no expectation of reciprocation. I am especially grateful to Mrs. Diana Rau from the Open University; Ms. Rickie Burman, curator of the London Museum of Jewish History at the Sternberg Centre for Judaism; Mr. Sam Melnick, an expert on the history of synagogues in London and Dr. John Klier from the Department of Hebrew and Jewish Studies, University College London.

I also owe a debt of thanks to my supervisor, Mr Alan Penn, for his invaluable guidance throughout the gestation of this thesis and to Professor Bill Hillier and Dr Julianne Hanson whose theories are a fundamental part of this work.

Lastly, my thanks go to my husband Neil for his support and to my son Daniel, whose birth towards the end of my studies encouraged me to finish on time.

Disclaimer: Any interpretations of the data from Williams, Freedman and the Data Archive are my responsibility and should not be seen as related to their work.

Table of Contents

List of Illustrations

Chapter 1	The Problem of 'Ghettos': perception and reality
Chapter 2	Space, Society and the 'Ghetto'
Chapter 3	From Theory to Practice: methods of analysing immigrant settlements
Chapter 4	Background to Settlement in Manchester and Leeds
Chapter 5	Analysis of Spatial Configuration: Manchester and Leeds 1881
Chapter 6	Analysis of Spatial and Social Structure: Manchester and Leeds 1881
Chapter 7	Analysis of Spatial Distribution of Occupations: Manchester 1881
Chapter 8	Analysis of Jewish Settlement Formation Through Time: Leeds 1841-91
Chapter 9	Discussion and Conclusions
Bibliography	
Appendix A	Data Set Compilation Methods
Appendix B	Glossary
Appendix C	Epilogue to this Thesis

List of Illustrations

	Title	Chapter Location
Plate 1	'Jewish East London'.	1
Figure 1	Compilation of Census Data.	3
Plate 2	Manchester - Background Map.	4
Plate 3	Manchester - Streets with Jewish Inhabitants.	4
Plate 4	Manchester - Definition of Address Types.	4
Plate 5	Manchester - 'Red-Bank' Area.	4
Plate 6	Leeds - Background Map.	4
Plate 7	Leeds - Streets with Jewish Inhabitants.	4
Plate 8	Leeds - 'Leylands' Area.	4
Figure 2	Scattergrams of Spatial Integration: All Manchester.	5
Figure 3	Scattergrams of Spatial Integration: All Leeds.	5
Plate 9	Manchester - Districts of Manchester.	5
Plate 10	Manchester - Global Integration.	5
Plate 11	Manchester - Local Integration.	5
Plate 12	Manchester - Radius-Radius (8) Integration.	5
Plate 13	Leeds - Global Integration.	5
Plate 14	Leeds - Local Integration.	5
Plate 15	Leeds - Radius-Radius (10) Integration.	5
Plate 16	Manchester - Sum Jewish Inhabitants per Street.	5
Plate 17	Manchester - Density Jews to non-Jews.	5
Plate 18	Manchester - Density Jews to non-Jews, 'Red-Bank' Area.	5
Plate 19	Leeds - Sum Jewish Inhabitants per Street.	5
Plate 20	Leeds - Density Jews to non-Jews.	5
Plate 21	Leeds - Density Jews to non-Jews, 'Leylands' Area.	5
Plate 22	Manchester - Work Addresses for Occupations.	7
Plate 23	Manchester - Depth from Home Address to Work Address.	7
Plate 24	Manchester - Depth from Work Address to Home Address.	7
Plate 25	Leeds c. 1841 - Global Integration (Showing 1891 Map in Background).	8
Plate 26	Leeds 1841-1891 - 'Jewish' Streets, overlaid by radius n integration.	8
Plate 27	Leeds 1841-1891- 'Jewish' Streets, coloured up by density bands.	8
Plate 28	Leeds 1841-1891- New/Existing 'Jewish' Streets.	8
Plate 29	Leeds 1841-1891 - Age Eldest Child Born in Britain.	8

CHAPTER 1

The Problem of 'Ghettos' - perception and reality

1. Introduction

This thesis stems from a belief that the term 'ghetto' has, possibly as long as it has existed, been applied in a misleading and emotive manner to describe immigrant or ethnic enclaves in cities. This thesis addresses the question of whether immigrant clusters are segregated by studying two settlements in England that have historically been called 'ghettos'. The two cases are of the Jews in Manchester, around 1880 and Leeds, from 1840 - 1890. The principal sources of data used are the decennial census returns for the relevant periods and historical maps of the two cities. Although based in the field of architecture and urban design, this thesis also looks at theories on settlement patterns of migrants and theories on the spatial form of society and reviews a considerable literature on the history of the Jews in England. It attempts to unpack the concept of segregation, which is frequently applied to describe a range of types of separateness, such as economic, social, ethnic, linguistic, although it is critically the physical phenomenon of clustering which seems to be most closely associated with segregation. In addition, the spatial nature of immigrant clusters, typically called 'ghettos' is examined in some detail, in order to see if they are segregated and if so, in what manner and also to see if they have an identifiable spatial configuration.

Two key questions are examined in this thesis:

- First, the question of whether the clustering of an identifiable minority is necessarily linked with spatial segregation is examined. A review of the literature on immigrant and minority clusters shows that both in popular debate and in academic research, there is considerable confusion as to whether an association can be made between clustering and segregation. The literature also suggests that sometimes an assumption is made that spatial separation can be linked to economic and social deprivation. This leads to a detailed analysis of the economic and social characteristics of the Jews in comparison with their neighbours, in order to control for immigrant characteristics in general and for social deprivation in general.
- Second, a question arises whether the Jews have distinctive characteristics that account for the apparent contradiction in the presence of strong ties across social and physical boundaries (due to a common language, culture, mode of prayer and kinship ties) and the presence of strong spatial ties, that make for an apparently socially cohesive and highly spatialised group (especially amongst the religious Jewish population). This thesis analyses the spatialisation of Jewish settlement in comparison with that of other immigrant groups in order to understand this contradiction.

Two further questions emerge from studying the literature of these issues:

- Do some groups tend to cluster beyond initial settlement more than others, and if so, why? This is a question highlighted by the review of literature on migration, which suggests that in some cases immigrant characteristics continue beyond the first stage of settlement. Studying the process of formation of Jewish settlement is therefore a critical issue since it allows for analysis of whether time is a factor in the manner in which it takes shape.
- Are minorities or non-conforming groups - defined as 'outsiders' - more prone to clustering (and segregation)? The debate reviewed in the following chapters also raises the question of whether such groups are more prone to support other group members in order to overcome the disadvantages of their position in society. This is studied by analysing factors of co-dependence, such as sharing a house with other people

from the same country of origin.

The purpose of this chapter is to outline the first two questions presented above and to introduce the key concepts raised in this thesis. The following section discusses the distinctiveness of Jewish settlement patterns, explaining the background to the use of the term 'ghetto' when describing Jewish settlement clusters; the next section reviews sources in popular and academic debate that make an association between minority clustering and segregation; after this comes a section that discusses the need for empirical studies of the phenomenon of minority clusters, whilst the section following that presents the key methods used in studies of this type. This chapter ends with a description of the chapter structure of the remainder of the thesis.

2. The Distinctiveness of Jewish Settlement Patterns

One of the key questions regarding immigrant or minority clustering is the question of whether clusters occur through choice or due to constraints imposed upon the group in question (although some theorists believe that both of these elements are involved). The following section discusses this question with regards to Jewish settlement, about which there is general agreement that it has had periods of clustering due to constraints, but has also had periods in which Jews have clustered through choice. This section also shows how Jewish settlement differs from that of other minority groups in the causes of clustering by choice (discussed in greater detail at the end of chapter 2).

The first Jewish quarter to be named 'ghetto', was that set up in Venice in the 16th century. The historian Carter (1983) maintains that the formation of Jewish enclaves in this period was more due to religious restrictions than external pressures.² In England, where political restrictions were not applied since the resettlement of the Jews in the 17th century, the Jews still clustered - but this has never been, since modern times principally the result of an outside imposition, but more the outcome of internal decisions.

• Jewish Settlement - Clustering or Segregation?

The economic factor in causing clustering amongst immigrants is cited by Wirth as being the commonest reason for the location of the Jewish, and other immigrant quarters on the edge of the central business district, since in the late nineteenth century unskilled employment was still generally concentrated in that area. Some sources maintain that economic constraints constitute an informal cause of spatial segregation, since they restrict physical mobility. Immigrants, especially when hired casually, need to live as near sources of employment as possible.³ It should be noted that several sources concur with this theory, amongst which Russell and Lewis (1900), who maintain that long hours of industrial work demand proximity to workshops and ease of access to markets.⁴ It could be claimed that Jewish settlement also tends to fit into this description, as stated by Lipman: 'Topographically, [the Jew's immigrant quarter] was adjacent to the central business district.'⁵

Most sources agree that the clustering of Jews has not been caused solely by the natural inclination of immigrant communities to concentrate in an area for mutual economic and social support; in addition to these lie the social and cultural reasons which are specific to the Jews. As mentioned above, Waterman and Kosmin (1987) suggest an explanation for the clustering of Jews through several generations beyond immigration - they hypothesise that when upwardly mobile, middle-class ethnic groups elect not to - or are unable to - assimilate fully into the host society, they need spatial clustering to make their ethnic institutions flourish. It is also notable that Waterman and Kosmin find that the Jews avoid spatial segregation - they suggest this avoidance is a choice made by the Jews to avoid their isolation from the host society which might prevent them from benefiting from 'full functional integration' into society⁶. This view is similar to

² Carter (1983), p. 180.

³ See chapter 4 for more on the labour market in the 19th century.

⁴ See Russell and Lewis (1900), p. 20 and the historian Bill Fishman's comments on the concentration of Jewish settlement on the Western edge of the East End of London being due to their availability as 'plentiful cheap labour...notably women engaged in outwork, lessened overhead costs for the employer'. Fishman (1988), p. 61

⁵ Lipman (1990), p. 51.

⁶ Waterman and Kosmin (1987), p. 254

that of Ruderman (1997), who postulates that in the 16th century Italian ghetto, the maintenance of Jewish cultural distinctiveness along with feeding in from the culture of the host society might be a model for the success of modern Jewish society - to allow it to integrate into the society yet maintain its cultural integrity.

Jewish settlement is repeatedly described as being exceptional in its 'ghetto' like characteristics, even beyond the first stage of settlement. These characteristics included social exclusion (exemplified by lower inter-marriage rates than other immigrant groups) - despite parallel economic integration.

Examination of historical texts find that the term 'ghetto' was frequently applied to London's Jewish quarter in the late nineteenth century, even though this settlement was indisputably an example of clustering by choice. The following quote, from Zangwill's 'Children of the Ghetto' (1892) demonstrates the prevalent attitude at the time, that the people of the East End were still fighting to survive in a squalid district, struggling to be released from the worst aspects of 'ghetto' life:

'This London Ghetto of ours is a region where, amid uncleanness and squalor, the rose of romance blows yet a little longer in the raw air of English reality... Their faults are bred of its hovering miasma of persecution... and they who have won their way beyond its boundaries must still play their part in tragedies and comedies - tragedies of spiritual struggle., comedies of material ambition... If they are not the Children, they are at least the Grandchildren of the Ghetto.' [Zangwill (1892), p. 1: 'Proem']

Russell and Lewis (1900), authors of 'The Jew in London', also associate the term 'ghetto' and its negative meanings with Jewish settlement. However, Russell also points to the possibility that the English ghetto will differ from its predecessors, and 'improve', due to the outside influences of modern society and western thought. Whether this will be a change in the degree of religious observance or simply a process of acculturation, due to the efforts of education being made in the area, is stated as being unclear. This predicted development is set in contrast to the old style ghetto: 'Judaism owes its strength and persistence, as well as its narrowness and impenetrability, to the stress of persecution.'⁷ It seems evident that Russell also believes that if this move is not made and the immigrants stay within the physical confines of the ghetto, 'independent and unabsorbed', they will be as 'a state within a state'⁸. It seems possible that Russell views the Jewish East End as confined as its European counterparts.

When applying the term 'ghetto' to Jewish settlement it is unclear whether, when writing about Jewish settlement in 19th century England, historians of the 20th century still mean to convey the original meaning of enclosure, or whether in some cases the term has come to mean the more benign: 'Jews quarter in a city'. Wirth (1928) in his historical review of Jewish settlement in 'The Ghetto', uses the term in the text as well as in the title, yet makes a clear distinction between the European ghetto and its western variety; from this it is possible to conclude that he believes that the term 'ghetto' has lost some of its original meaning. Yet more recently the Jewish historian Lipman (1980) has contended that the post 1881 Jewish settlement in London was 'a classic example of an area of first settlement or "immigrant ghetto"'⁹, although in a later publication by Lipman (1990), it seems evident that he had revised his understanding of the term 'ghetto', writing that the reason he avoids using the word in his book is '...because historically this term, taken from the precedent of Venice, implies an area in which Jews were compelled to live. In the Jewish quarter of modern great cities they lived without governmental compulsion.'¹⁰ It seems that Lipman has moved from the view of 'ghetto' as simply an area of settlement, to the notion that the term suggests an element of enforcement.

Other recent studies, for instance that by Waterman (1989) of late 20th century Jews, identify immigrant settlement in clusters with greater precision, and note that they tend to constitute 'concentration without segregation'. He also writes:

'there is an anomaly by which the Jews in England, like a few other immigrant groups, although culturally absorbed in the general population have remained distinct and distinctive as a group on a voluntary basis. Certain groups not only maintain high levels of distinctiveness long after they have ceased to be immigrants but also retain high levels of spatial concentration.' [Waterman (1989), p. 3].

In other words, despite the fact that the majority of this group was British born, and were not in the need of

⁷ Russell and Lewis (1900), p. 94-95.

⁸Op. cit., p.9.

⁹ Lipman (1980) p. 40.

¹⁰ Lipman (1990), p. 63, note 32.

the proximity that the interdependency of immigrants demand, they continued to settle in observable clusters. We also find Lipman (1990) concurring with these assertions, writing that 19th century clustering was not reserved for the immigrant populations of that period; he suggests that even when moving to the suburbs (in the 1880s), London Jews followed a distinctive pattern of clustering in particular neighbourhoods and such was also the case for the more established residents of the East End of this period, who moved into Stepney and Bow.¹¹

It is evident that many sources agree that the term 'ghetto' can be applicable even in the case of voluntary clustering by immigrants, such as the case of the Jews of England.

• Jewish Spatial Clustering - Description and Analysis

Historical research suggests that the Jews lived in tight clusters of settlement in 19th century England - the period studied here. Even when they moved away from their initial area of settlement, they tended to settle in definable areas of the city (albeit in a more distributed fashion). What is apparent is that the 'ghetto' was not a fixed entity, whose characteristics remained static for long, rather, the spatial containment of the Jews was almost unrestrained:

'For the Jewish community at the East End is like a reservoir fed from beneath: the influx of destitute foreigners is compensated by a continual overflow of settlers and natives into more well-to-do districts and into richer classes.' [Beatrice Potter, 'East London Labour', *The Nineteenth Century*, XXIV (1888), pp. 176-177 quoted in Englander (1994), pp. 142-143].

This quote suggests that any study of 'ghetto' settlement must account for the fact that although settlement patterns seem static, in actual fact they are in constant flux, especially in the case of immigrant settlement, which is more prone to change. This brings to mind the Greek philosopher Heraclitus' statement that one cannot get into the same river twice since it is always moving; since the 'ghetto' is a constantly changing spatial artefact, the very nature of the ghetto is to be in a fluid state. It is also interesting to note that the historian Newman (1985) concurs with these thoughts, when writing of the Jewish 'ghetto' of the East End of London: 'Arkell was anxious to point out [the map's] essentially ephemeral nature, explaining for example that the information he had used was collected between March and October 1899, and that it could very quickly have become outdated... In a sense, then this map encapsulates and ossifies an essentially fluid situation'¹². Plate 1 at the end of this chapter reproduces Arkell's map of Jewish London, published in Russell and Lewis' book on the Jews of London (1900)¹³. It illustrates the impact that the graphical illustration of data can have on understanding the spatial pattern of immigrant settlement, by showing in clear terms the areas in which Jews were a majority (coloured blue) and the fine detail of their settlement in the area of the East End of London.¹⁴ The following section discusses the type of studies made in order to analyse urban settlement patterns and shows how the analysis made in this thesis fits in to the field of study.

3. The Concept of 'Ghetto': Perceptions of Immigrant Clustering

This section reviews the concept of 'ghetto', in order to arrive at an understanding of the impact of the meaning of this term on the way in which immigrant clusters are discussed and analysed. The following sections first highlight the position of the concept in popular debate, then in academic debate and then continue with a review of perceptions of the relationship between clustering and economic segregation, ending with a review of the relationship between clustering and co-dependence and self-help.

3.1 Perceptions of Clustering - in Popular Debate

¹¹ Op. cit., p. 15.

¹² See Newman (1985), p. 3.

¹³ From Russell and Lewis (1900): *Jewish East London*, London Museum of the Jewish East End and Research Centre, with permission of the Guildhall Library, City of London.

¹⁴ This thesis replicates this method of description by translating the Manchester and Leeds data into similar formats, as can be seen in chapter 5. This fluidity of immigrant settlement form helps justify the choice of decennial census data as the principle source of social data for this study; since they provide a snapshot of events on a specific evening in a specific year, they help arrest the movement of the 'river of change' in

The perceived problem of enclaves is central to current popular debate, where the foreignness of such settlements and their lack of integration into the host society, is seen as a critical part of the inner city problem in the West today. This is exemplified by the following letter to the editor of the Daily Telegraph, entitled 'Race Relations Must Avoid Ghettos', which appeared in January 1997:

'We are informed that we are to have a place known as Banglatown in London's East End... The very suggestion seems to me offensive... The attempt to change established place names is an attempt to pervert history, and to create foreign ghettos in the heart of our cities... [this is] a proposed development that explicitly denies [integration] and puts self-conscious separatism in its place.' [Honeyford (1997)].

The perceived problem of minority clusters in popular debate was discussed at a recent conference entitled 'A Question of Identity'¹⁵, where several papers centred around the perceived problem of 'ghettoising' of immigrant minorities in 20th century Britain. One example given there of current debate on the issue, quoted by Rhoderick Chalmers from the Equalities Unit at Camden Council in London, was an article from the *Observer* supplement dated 9/3/97, which portrayed the Bangladeshi immigrants of England as 'ghettoising' themselves by teaching their young to read and write in their mother tongue. Another paper, by John Eade from the Roehampton Institute¹⁶, described the vigorous hostility amongst the general public towards *muezzin* who call the Muslims of the East End of London to prayer - the Muslims were also accused of cutting themselves off from British life (and drowning out the sound of church bells).

These negative perceptions are not new to the late 20th century. Numerous accounts of 19th century slums show the negative perceptions associated with clusters of ethnic minorities. One example of 19th century perceptions of slums can be seen in a review of newspaper cuttings from the turn of the century by Mayne (1993). Here we see that despite the perceptions, or reality, of disease, degradation and danger, people ventured into the slums as if to view an exotic other world:

'In Sydney slumland is "discovered" by "municipal expeditions" which set forth to "explore" the "wilds"... This sense of discovery is strengthened by analogies of foreign evangelisation and conquest...' [Mayne (1993), p. 161].

Fear of the foreigner became especially acute after the influx of principally refugee immigrants into Britain and the United States in the 1880s and 1890s. Newspapers were full of outcries at the influx of 'foreigners' - as can be seen in Mayne's 'The Imagined Slum':

'In 1900 the *Examiner* noted that the moment the plague quarantine cordon around Chinatown was removed, the Chinese "began to swarm in and out". This sense of foreign intrusion was strengthened by styling Chinatown a "colony". The term was widely used in American cities to characterise poor immigrant districts. In 1904 Robert Hunter argued that the slum problem was perpetuated by the "millions of foreigners [who] have established colonies in the very hearts of our urban and industrialised communities"... Birmingham's slums, too, were referred to as "these colonies of disorder and sin".' [Mayne (1993), p. 158].

This added negative factor of uncleanness, sin and squalor is another aspect of the difficulties in the public perceptions of ethnic enclaves.

3.2 Perceptions of Clustering - in Academic Debate

The examples given so far are taken from the press. Yet academic studies of the subject of ghettos are also not immune to negative perceptions of immigrant enclaves and this subject is an important part of academic debate in such fields as human geography, sociology, economics and social policy. It is the contention of this study that the term 'ghetto' carries with it the weight of prejudice, which is part of the problem with the manner in which immigrant settlement is viewed; when using the term 'ghetto' the implication is nearly always meant to be negative, with connotations of segregation, clustering, exclusiveness, seclusion, and so on. As has been pointed out by Ravid (1992), even when studying the 'ghetto' of pre-emancipation Europe, the historical analysis tends to be distorted because of the negative connotations of the word. He suggests

order to study its form.

¹⁵ The conference was held on 22/3/97 at the Centre for the Study of Migration at Queen Mary and Westfield College, London.

¹⁶ The paper was published in Kershen (1997).

that despite perceptions to the contrary:

'The establishment of ghettos [in the seventeenth and eighteenth centuries] did not lead... to the breaking off of Jewish contacts with the outside world on any level, from the highest to the lowest... Additionally... from the internal Jewish perspective many evaluations of the alleged [negative] impact of the ghetto upon the cultural and intellectual life of the Jews and their mentality require substantial revision' [Ravid (1992), p. 384].

One of the difficulties in the use of the term 'ghetto' is its multiplicity of meaning. It can variously be used to describe exclusion due to poverty, due to ethnic membership, due to physical separation, due to economic deprivation, or due to occupational segmentation, among others. When used to describe one of these states, the other potential meanings are strung along as well. Thus, the ethnic cluster is assumed to be physically separate and so on.

For example, Peach (1968), in his study of West Indian immigration to Britain, maintains that one of the greatest fears about 'coloured' immigration to Britain was the fear that this might lead to the 'formation of ghettos'. Moreover, he seems to believe that ghettos are bad for modern cities:

'There is a universal and probably correct assumption that ghettos are the geographical expression of social failure. The ideal distribution, from a social point of view, seems to be dispersal' [Peach (1968), p. 83].

In other words, the only solution to the 'problem of ghettos' is to cause the dispersal of its elements amongst the host population.

This solution is also mooted by the geographer David Harvey in 'Social Justice and the City' (1973), who accords an important role for economics in creating the physical form of the city and for allowing movement of people out of poverty districts (which he calls 'ghettos'). Harvey's Marxist approach can be seen in his division of cities into 'capitalist' and 'redistributive'; the first of which supposedly confine people, especially the poor, into specific areas of the city and the latter of which allow for movement of the poor out of the segregated areas of the city. According to Harvey, people who live below the poverty line in cities act as a 'surplus labour force to be drawn upon in times of expansion and relinquished in times of contraction'¹⁷. In Harvey's view, segregation in the 'capitalist city' is a 'tangible geographical expression of a structural condition in the capitalist economy'; in other words a physical separation that cannot be solved by redistribution since it is 'structurally determined' by the 'self-regulating market'¹⁸. On the other hand, in a redistributive city, it is possible to achieve flexibility in the labour market by using public planning policy, for example, to provide 'low income housing close to suburban employment opportunities'.

This approach, where the principle cause of 'ghettoisation' is seen to be social divide is exemplified by Castells (1977), who contends that the urban ghetto is the outcome of class relations: 'in the case of American slums, for example, racial discrimination is two fold... the distribution of the subjects in the social structure and, on the other, by the distribution of housing and amenities in space. Their high cultural specificity results, therefore, from this correspondence... through the conditions of the particular organisation of the class struggle in the United States.'¹⁹ Castells' view seems to be that the minority element of the 'ghetto' is the outcome of class divide and omits to consider the possibility that spatial separation may be caused by ethnic divide before economics and class are brought to bear. Castells also identifies the problem of measuring the class structure of immigrants - since immigrants may not be working in occupations for which they have been trained or that match their educational attainments.

In some cases theorists propose that immigrant or minority enclaves are perpetuated by economic segregation. For example, Jacob Riis' study of the slums of New York in the 1890s in the book edited by the sociologist Cordasco (1968). He maintains that a colour line existed in 1890s New York to define the location of 'coloured population' from the southern States. Due to their lack of appropriate skills, the migrant's 'sphere thus defined, he naturally takes his stand among the poor, and in the homes of the poor... until recent times he was practically restricted in the choice of a home to a narrow section on the West Side'²⁰. Similarly, in a study of coloured immigrants in Birmingham which analyses their distribution in

¹⁷See Marx: 'Capital', vol. 1, chapter 25, quoted in Harvey (1973), p. 272.

¹⁸See Harvey, op. cit., p. 273.

¹⁹Castells (1977): 'The Urban Question'. Arnold, London, p. 108 quoted in Peach (1981), p. 31.

²⁰See Cordasco (1968), p. 51. Riis was a newspaper reporter, concerned with the slums of New York.

1961 and 1966 Jones (1970) proposes that the intensification of density led to 'ghettoisation' and the creation of 'enclaves' or 'colonies' of the minority population.

The belief that there is a relationship between ethnic clustering, and economic segregation can also be found in the paper by Smith (1989): 'The Politics of Race and a New Segregationism', in which she maintains that the racial exclusion of the blacks in Britain has been perpetuated by housing policy and the lack of good housing stock in areas where they are able to purchase. She maintains that the desire for integration prevented blacks from moving en masse to good areas of the city. She calls this structural racism, whereby formal rules on housing coupled with lack of employment opportunities where Blacks tend to reside, tend to perpetuate the racial segregation; thus in her view, economic segregation leads to ethnic segregation:

'The organisation of residential space may, in short, be regarded as a component of the 'structural racism' which.. is concentrating black people spatially, socially and economically in to areas of decline... Integrationism denied cultural minorities the right to live together without sacrificing the prospect of decent homes in pleasant neighbourhoods.' [Smith (1989), p. 162].

3.3 The Spatial Impact of Clustering on Economic Segregation

Others theorists maintain that the problematic nature of economic enclaves will only become acute when the social differences are directly reflected in spatial differences, or when the degree of spatial differentiation 'impedes the mobility of individuals and families... [where] they are conscious of curtailed freedom'.²¹ Chisholm (1990) maintains that the distribution of housing stock may contribute to the perpetuation of class division in urban space, since areas with high percentages of council-owned properties are likely to have large numbers of people moving within a relatively contained area:

'There is little doubt that, given the large scale of many estates in both the public and private sectors, the effect has been to emphasise the homogeneity of residential areas and the sharpness of the social divide which separates them.' [Chisholm (1990), p. 35].²²

Even when the analysis of ethnic clusters is carried out spatially, the assumption that clustering leads to physical separation tends to be automatic. For example in his study of the significance of 'neighbourhood' and 'community' in Dublin Jews' residential change decisions in the 20th century, the geographer Waterman (1983), seems to equate clustering with separation:

'these concentrations... take the form of segregated sectors or clusters within the urban area, thus often leading to a more restricted view of the overall city area than that which might be expected.'²³

On the other hand, occasionally sources suggest that cultural and physical segregation are not necessarily synonymous. For example: Pooley (1977), in his study of Irish, Welsh and Scottish migration in Liverpool in 1871 concludes that not every clustering is inherently segregated. The negative position of exclusion and ghettoisation in current thinking on cities is best described by Johnston and Herbert (1978), in a section on 'territories and minority groups', in which they maintain that 'continued prejudice against members of a long-established minority group can lead to the maintenance of ghettos as 'frontier outposts''²⁴ Thus the minority enclave has become analogous with conflict and division.

²¹ Chisholm (1990), p. 34.

²² However, Chisholm also suggests that fear and hostility to the minority may diffuse once the majority population has become more used to their differences and also in cases where the cluster is not maintained over time, due to people moving away once they have obtained economic mobility.

²³ Waterman (1983), p. 55.

²⁴ Johnston & Herbert (1978), p. 11.

3.4 The Impact of Clustering: on Co-Dependence and Self-Help

On rare occasions minority clusters are viewed positively as ways in which conflict can be avoided and the minority culture can be maintained. For example, in a study of ethnic residential clustering in the United States by the geographer Kramer (1970), he states that the 'principle of closure' in the 'ghetto' operated to protect its cultural insulation and social isolation. Avoidance of all but the most impersonal economic contact with the dominant group minimised the potential for conflict and thus helped to preserve the distinctive values of the ethnic group.²⁵ Boal (1978) finds common factors between ethnic minorities in general, who favour clustering in order to maintain their cultural integrity. He states that Jews in present-day Chicago favour proximity to other Jews to such an extent that the likelihood of their children marrying another Jew approaches certainty. In a similar fashion to the Jews, for immigrants from the Pacific Islands in New Zealand...

'proximity to persons of the same ethnic background provides an important means of preserving traditional cultural patterns and group identity.'²⁶

However, Boal also points out that in the modern city, homogeneity can lead to a lack of assimilation, especially in settlements arising from chain migration, which tend to be extremely homogenous.²⁷

Ward (1982), in his review of ethnic enclaves in the United States further strengthens its positive aspects. He suggests that the fear of the 'ghetto', which was most acute in the late 19th century and was due to overcrowding, fear of foreign clusters and associated problems with poverty enclaves may be contradicted by an awareness that immigrant enclaves can be positive to the group itself and to the life of the city: family life being more stable in certain immigrant cultures and incidence of lower mortality coupled with high levels of self-help amongst the community. Ward therefore proposes that the perception that integration and assimilation should be the ultimate aim is one that should be changed. Rather, continued self-association with the ethnic group can be maintained even when it is no longer physically proximate in space and thus the positive aspects of the social networks based on common origins may be maintained. Similarly, Waterman and Kosmin (1987) propose, in a study of 20th century ethnic cohesion amongst the Jews of the United Kingdom, that by maintaining a certain degree of clustering even in the third and fourth generation after immigration, this group manages to make religious and cultural institutions viable - and thus achieve group cohesion - whilst still having 'full functional [economic] integration' into the host society. Jewish settlement is discussed in greater detail in the following section.

As well as separation by class and country of origin, some sources maintain that religious affiliation can also constitute a degree of separation from the majority population. As pointed out by Chisholm (1990), when more than one of these differences occur, the problem becomes much more tractable. Therefore, cases where an immigrant population settlement is poorer and of a different religion from the majority population are potentially going to constitute a greater problem. Yet the social anthropologist Sibley (1992), who discusses the relationship between the visibility of 'outsiders' (defined as minorities or non-conforming groups) and their rejection by society, suggests there may be an advantage in this: 'to remain hidden, out of sight of the dominant society, may also be the advantage of the minority...' since they are less likely to be rejected if the majority population is unaware of them²⁸. Both Kramer (above) and Chisholm seem to see clustering as a protective device for oppressed minorities.

4. Architecture, Human Geography and the Need for Empirical Studies

The previous sections have dealt with the theoretical issues that lie behind this thesis. The following section discusses the types of studies which discuss the issues and proposes that this thesis will help fill a gap in analytical studies that have been made into minority settlement patterns.

Although social/spatial analysis has been conducted to a certain extent since the 1920s²⁹, when a growth of

²⁵ Kramer, J.R. (1970) *The American Minority Community*, Crowell, New York, in (Boal, 1978), p. 65.

²⁶ Boal (1978), p. 65.

²⁷ Op. cit., p. 64.

²⁸ Sibley (1992), p. 121.

²⁹ See Peach (1981), p. 19: 'the revolutionary idea which Park propounded... was that social analysis could

interest in the field of socio-anthropology took place, studies of ghetto type settlements are relatively few; this is mostly due to the lack of suitable data until the middle of the 20th century (when the first censuses of the 19th century became available) but also, according to Smith (1989), this is due to the fact that those concerned with the 'politics of race' have been more interested in the economics of labour migration and the sociology of 'race relations' legislation than the geography of settlement. This lack of empirical studies into ghettos is confirmed by others, such as Pooley and Whyte (1991), who suggest that work which has been done on ghettos, concentrates on London, to the detriment of studies of provincial settlement, whilst W. Pryce maintains that:

'And, indeed, much work remains to be done on specific nineteenth-century localities [of migration settlement] to discover the detailed patterns of settlement, their relation to local resources (rentable housing, for example, or work within walking distance) and changing patterns over time.' [Pryce (1994), p. 164].

This thesis also proposes that there is a lack of agreement on the nature of 19th century settlement patterns that may be resolved by socio-spatial analysis of Manchester and Leeds, since some historical geographers, such as Ward (1975), suggest that in contrast with Victorian perceptions, the 19th century city was surprisingly undifferentiated; whilst numerous other scholars, such as Pooley (1977) and Carter (1983), maintain that high levels of segregation existed in the 19th century city; and suggest that certain economic and migrant groups were especially prone to 'ghettoisation'. Not only is there a need to clarify whether ghettos existed in the 19th century city, we also need to study their character. Moreover, whereas some sources allude simply to the 'ghetto' as a homogenous lump, we find that Englander (1994) maintains that within the immigrant ghetto there was a distinct lack of homogeneity³⁰ and even the great social commentator Charles Booth suggested in the 1890s that 'whether the sources of differentiation are such as to enable us to speak in the plural for the Jewish communities of east London, with significant cultural distinctions, is something which could form the basis of a worthwhile research project.'³¹

The disparity has been pointed out by sources such as Cannadine (1982), who has noted that historical geographers are firmly divided on this point. He suggests that a solution to the problem lies in use of two conceptions of 19th century residential differentiation; one, an objective conception, will be derived from census type data and will be concerned with criteria such as income, occupation, ethnicity and so on (which he sees as partially unreliable); two, a subjective concept, will be based on contemporary perceptions of the reality 'on the ground' although he is at odds to find a research project that will investigate the link between spatial and social patterns³². This disparity of opinion seems to beg an objective study of urban settlement that is considered segregated (or 'ghetto' like).

The questions raised by this thesis are tested in two similar instances of Jewish settlement in provincial England, Manchester and Leeds, which enable verification of the findings and comparison between the different circumstances of each case. The variation of the type of data available in each case also allows different aspects of Jewish settlement to be analysed. The decision not to include London in the sample, despite its importance as the main centre of Jewish settlement both in the past and present, has been principally due to the lack of studies of Jewish settlement in the provinces³³. In addition London, being the capital city, constitutes a very different type of case from the other cases - due to differences in scale, population characteristics, occupation patterns and so on. Choice was also guided by the availability of data, of which excellent sets were available for the two cases studied.³⁴

Another contribution to the decision to study the two cases, is that Manchester and Leeds, along with London, have been cited as important examples of Jewish settlement and have been noted by historians as being especially prone to the definition of 'ghetto' (although analysis of the entire area of settlement, and not only the dense area of settlement considered 'ghetto-like' was conducted for this thesis):

be treated like physical sciences' he quotes from Park (1926), p. 18: '... it is only as social physical facts can be reduced to or correlated with, spatial facts that they can be measured at all'.

³⁰ Englander (1994), p. 9.

³¹ Booth Collection, A19, fos. 74. 97; A23, fo. 92 in Drake, (1994), p. 188.

³² See Cannadine (1982), p. 240.

³³ London has been studied in a similar manner by the author in recent years. See unpublished MSc. thesis by the author, Vaughan (1994).

³⁴ A data-set on the Jews of Scotland (not yet completed) was discovered during the course of writing this thesis. See Kaplan (1997). Another data-set not used here (which could not be obtained) was that used as a basis for mapping the location of Jews in Birmingham, in Josephs (1980) and Josephs (1984).

'It was the political implications of mass immigration which agitated Anglo-Jewry and conditioned its responses to the newcomers. The rapid increase in the foreign Jewish populations, its ghetto-like concentration in East London, Leeds and Manchester and the hostile response it engendered, alarmed British Jews' [Englander (1994), p. 247].

The definition of the Leylands area of Leeds as a 'ghetto' can also be found in contemporary descriptions of the area:

'There are many Jewish workers [in Leeds]. Almost all of them belong to the tailoring trade... Most of the workers have not been in England long. Some less than a year, some several years... Templar Street in Leeds is a ghetto as existed in the old days in Rome, Prague and Frankfurt on Main'. [From *Poillische Yidel*, 25 July 1884 in Kershen (1995), p. 39].

The nature of immigration to Manchester in the 19th century has also been cited by the historical geographer Pooley, as an important gap in the knowledge base on immigration in general and Jewish immigration specifically 'without it we are lacking information on one of the city's important minority groups'³⁵.

5. Methods: Analysing the Spatial Form of Society

This section deals with the methodology used in this thesis, starting with highlights of the problems in other studies of this type.

5.1 Difficulties of Analysing 'Community' and Segregation

• The Need for Multiple Measures of 'Community'

The historical geographers Dennis and Daniels (1981) in their article: '"Community" and the Social Geography of Victorian Cities' point to the many problems with quantitative studies of nineteenth-century cities, noting that not only are some of the techniques flawed, but they also use questionable theories, such as the concept of 'community'. They suggest that the concept is based on unproved theories, and that techniques used to describe and measure community life are potentially inaccurate, since the measurement of social relations does not necessarily imply knowing the structure of 'community life'. (The derivation of the concept of 'community' and its development in various academic fields is discussed in the next chapter). Dennis and Daniels also suggest that the techniques currently used are inaccurate because the techniques tend to be applied in differing manners, depending on the data sources available. Dennis (1982) and Dennis and Daniels (1981) promote the 'importance of using multiple measures to analyse community structure' and suggest that historical quantitative studies should use, for example, various 'indices of segregation' and should study various 'aspects of the community' (work-place and social meeting places as well as place of residence): 'quantitative analysis... can only be as precise as the data are accurate, and as complete as the data are representative'³⁶.

³⁵ Pooley and Whyte (1991), p. 202.

³⁶ Dennis (1982), p. 275.

• The Need for a Precise Measure of Segregation

One of the most commonly used measures in the analysis of community structure and urban analysis in general is the measure of segregation. Segregation is normally measured in geographical studies by plotting the percentage distributions of social variables by the sub-area of the city. This is taken for each variable in turn, for instance the percentage of people in each social class, per district; in overcrowded households or from the same place of birth. It is suggested by Roy Lewis³⁷ that broad social contrasts are revealed by this method and spatial correlations can be made between maps of each of the variables. However, many of these studies are problematic, as segregation is a concept whose meaning is not consistent. In some studies 'segregation' refers to cases of singular social areas [e.g. Peach (1975): 'Urban Social Segregation']; and in other studies, refers to cases of singular class areas [e.g. Page (1991): 'The Mobility of the Poor: a case study of Edwardian Leicester'], whilst in a third type of study singular ethnic areas are analysed [e.g. Simmons (1981): 'Contrasts in Asian Residential Segregation'] - although some studies may conflate the term 'segregation' to cover ethnic and social singularity, for example.

This thesis will contend that a more critical problem underlies studies of this type, in that they analyse a spatial concept - segregation - by using social parameters, rather than analysing the spatial configuration itself to see if it is segregated. Moreover, invariably the social data are aggregated by ward, enumeration district or some other area, thus introducing a possible inaccurate boundary to the analysis. This problem of aggregation is partially due to the fact that census data are only available as summaries at the scale of the enumeration district until a century has elapsed from publication. (This means that data at the household level are currently only available up to the 1891 census.) On the other hand, even in the case of studies of pre-20th century settlement - such as Pooley (1977), who studied the clustering and dispersal of Irish-born migrants in Liverpool in 1871, we find that data are aggregated per ward.

5.2 Analysis in this Thesis

The problem of using singular measures of 'community' is overcome in this thesis by using a variety of measures, derived from the census data, but also measured against the spatial attributes of the cities in question. In other words, analysis is enabled not only of the location of Jews, but of their relative proportions within the general population; in addition to which comparison can be made between the social and economic characteristics of the Jewish population and those of the population with which it resides.

The difficulties of defining the concept of 'ghetto', (as described in section 3 above), and of measuring segregation, are dealt with in this thesis by calculating the relative proportion of the Jewish population to the total numbers of household in all streets in which they lived, in order to arrive at an accurate index of ethnic density.

• Three main indices of 'ghetto' like character are employed in this thesis:

- 1 physical segregation: are the streets in which the Jews lived spatially well connected to the rest of the city or not; to see if the area considered the 'ghetto' district in each of the cities analysed was spatially distinctive from the rest of the city.
- The method used is to calculate *integration* - using a system for measuring the attributes of urban space ('space syntax'), which has been shown to be an objective method of measuring the accessibility of spatial configurations³⁸. Space syntax methods are independent of social parameters so overcome the problem of analysing spatial concepts with social data, since it is possible to measure the relative segregation of streets or streets systems without relying on social data.

Space Syntax analysis examines the spatial configuration of cities by defining all external spaces as a continuous network of space. The spatial configuration is represented by the set of the fewest and

³⁷ See Drake and Finnegan (1994), pp. 199-200.

³⁸ Hillier and Hanson (1984).

longest lines of visibility and permeability that link between all spaces in the network ('axial lines'). The axial lines are analysed by computer as a pattern of accessibility, measuring the relative distance of each part from the system as a whole, and then describing the system according to the distribution of accessibility; ranging from the most accessible, 'integrated', to the least accessible, 'segregated'. 'Space Syntax' methodology is explained in full in chapter 3.

- 2 social class distribution: did the Jews have a distinctive social pattern, measured by occupation, household structure, self-help, etc. and was the social structure different in the districts occupied by Jews in high density, than elsewhere in the city and compared with non-Jews in the high-density district.
- This analysis is conducted at the detailed level of the street, rather than the sub-area - which is commonly the smallest geographical unit analysed in studies of this type. This allows for a greater objectivity in analysing the data, since there is no need to define the boundaries of the sub-area. Social and economic variables are brought to bear to see how different Jewish households are from their neighbours, from their neighbourhood, and from the city as a whole. Spatial integration is used as a control for this and the following measures to relate the social measures to the spatial³⁹.
- 3 occupational enclaves: did the Jews occupy a distinctively different type or range of occupations and was the occupational structure different in general for the districts occupied by Jews in high density.
- This is studied here by plotting data on the spatial location of occupations and by making comparisons between the distribution of occupation types. In addition, the analysis of workplace to home spatial relationships looks at measures of economic segregation.

Lastly, analysis of the formation of Jewish settlement over time looks at the question of whether the 'ghetto' is a static or an evolutionary spatial form and reviews the process of immigrant settlement formation by plotting data on relative density as time series.

By examining instances of 19th century settlement, this thesis not only gains in the level of detail in the available data (since detailed census data are only available up until 1891) but allows the study of the change in settlement form through time, that a more recent study would not allow. In addition, an historical study lends distance to the discussion of a potentially emotive subject.

As mentioned above, the analytical section of this thesis deals with two cases of Jewish provincial settlement in England: Manchester and Leeds. The two cases are comparable in size and the manner in which the populations were constituted and various sources have noted the 'ghetto like' character of the two cases⁴⁰. It is these characteristics which led Manchester and Leeds to be compared in the first part of the analysis, which focuses on the year 1881, a year which serves as a useful cut-off point for studying Jewish settlement form, since the period of mass-migration from Eastern and Central Europe is usually dated from 1881 onwards, when pogroms in Russian territories caused the exodus of massive numbers westwards until the outbreak of the Great War in 1914.⁴¹ Although the two cases are comparable for the purpose of detailed

³⁹Recent studies of deprivation in the contemporary city also use multiple measures of poverty - such as the indices published in Abelin, T., Brzezinski, Z. and Carstairs, V., (Eds.) (1987), Carstairs, V. and Morris, R. (1990) - but these are based on census area summaries, due to the lack of availability of household based data before 100 years have lapsed after a census. Typically these include measures of unemployment, overcrowding, no car, low social class (defined by economically active members of household), see Lee et al (1995).

⁴⁰See Englander (1994), p. 247 and Lipman (1990), p. 99.

⁴¹Therefore, the 1891 census normally reveals massive change in the form of the Jewish areas of London and other major conurbations, due to the influx of large numbers of relatively impoverished immigrants. For instance, Murray Freedman suggests that the Jewish population of Leeds more than doubled between 1881 and 1891 due to this influx. See Freedman (1992), p. 7.

analysis of the main questions detailed above, it is necessary in the following analytical chapters to deal with the data-sets separately. Firstly, the Manchester case offers the opportunity to study the occupational structure of the Jewish settlement in detail, since only in this city was there an established economic base by the year in question. Secondly, the Leeds case offers the opportunity to study the formation of Jewish settlement from its start, since history of the Jewish community in Leeds points to its establishment from around 1841, which happens to be the first year of the modern census (whilst Jewish settlement in Manchester dates from the 18th century). The following section gives more detail on the chapter structure of this thesis.

6. Thesis Structure

Chapter 2 reviews theories and research which relate to those used in this thesis. This chapter sets out the theoretical parameters of the ghetto question. The first section reviews the body of literature that makes a link between the form of society and spatial structure and discusses various paradigms, such as 'community' and 'territoriality'. The next section reviews theories on migration and settlement and discusses the various types of social impact caused by spatial clustering. Next, a review is made of the type of studies made in these fields. Lastly, a review is given of the most common methods employed in studies into immigrant clusters.

Chapter 3 reviews the methods used in analysing immigrant settlement both as a background to the methods used in this thesis and also in order to highlight difficulties apparent in studies of its kind. This chapter also presents the sources of data used in this thesis and reviews their limitations and application.

Chapter 4 is a chapter that lays the ground for the argument by setting the scene from a historical, geographical and economic point of view, and highlighting where differences of opinion can be resolved by the analysis undertaken in this thesis.

Following are four analytical chapters which are organised in two pairs. Chapter 5 on space and ethnic structure, is expanded by Chapter 6 on space and social structure; in each comparing ghetto and secondary settlement areas in Manchester and Leeds as two similar settlements (although the Jewish settlement in Leeds started at a later date).

The aim of Chapter 5 is to address the question of whether clusters of minority population tend to be located in spatially segregated areas of the city. This chapter deals with data from the 1881 census in Manchester and Leeds, which gives information on the Jewish population of the cities as a whole, in the context of the general population of the cities in question. In addition, this analysis focuses on the high density districts of Jewish settlement in each city (Red Bank and Leylands, respectively) in order to study the areas historically considered the 'ghetto' districts of the two cities, to see if immigrant or minority clusters are distinctive from a spatial point of view.

Chapter 6 also deals with data from the 1881 census in Manchester and Leeds. The purpose of this chapter is to see whether the high density districts of Manchester and Leeds were distinctive in their social class and household structures.

These chapters raise two key findings: a) social structure seems to be quite different for Jews when compared with the remaining population; by some parameters weaker than non-Jews and by some stronger; b) spatial structure differs between the area of high density settlement (normally the area of initial settlement) and other areas of settlement by the Jews, which raises the question of how immigrant settlements are formed.

Chapter 7 expands on the findings of Chapters 5 and 6 further by studying occupational structure in Manchester, where Jewish economic development was further developed than in Leeds. It focuses on Manchester in 1881, by utilising a data-set of work addresses of a significant portion of the Jewish population. This provides the opportunity to study the spatial distribution of Jewish occupations. The aim of this analysis is to address the question of whether occupational enclaves exist and whether they are more prevalent amongst immigrant populations. In addition, by analysing clustering by occupation - it looks at the question of whether people are more likely to share households with others from the same occupation or from the same country of origin. This chapter also describes the economic integration and the spatial distribution of occupations of the Jewish population in 1881. This analysis, along with the two previous

chapters approaches the question of whether there are differing factors of integration in existence amongst the Jews.

Chapter 8 expands on the findings of the previous chapters by studying the formation of the Jewish settlement in Leeds. This chapter looks at migrant population shift between six consecutive censuses of Leeds, from 1841 to 1891, making a temporal analysis of the change in Jewish settlement form. By mapping the location of Jewish families and their relative density within the existing population in each census it is possible to analyse the graphic depiction of the formation of Jewish settlement. The period 1841 to 1891 was chosen firstly, since the earliest available census data was 1841, when records began; but also since 1841 was a useful start date, since Jewish settlement in Leeds dates from around this time. 1891 is the most recent fully detailed census currently available.

Chapter 9 discusses and draws conclusions on the findings of the analytical chapters in the light of the questions raised in the introductory chapters. The questions regarding the spatial configuration of immigrant settlement are broadened into a discussion of more general issues, such as social cohesion and the relationship between occupation, social class and urban form.

This thesis ends with a bibliography, followed by three appendices:

- a. detailed description of the manner in which the raw data used in this thesis were compiled into numerous computerised statistical data-bases;
 - b. glossary on terminology relating to Jewish practices and prayer;
 - c. copy of a paper presented at a conference in 1997, which reported on the pilot study for this thesis.
- The pilot study tested several of the key analytical question described above with relation to the settlement patterns of Jews and Irish in Leeds in 1841 and 1851.

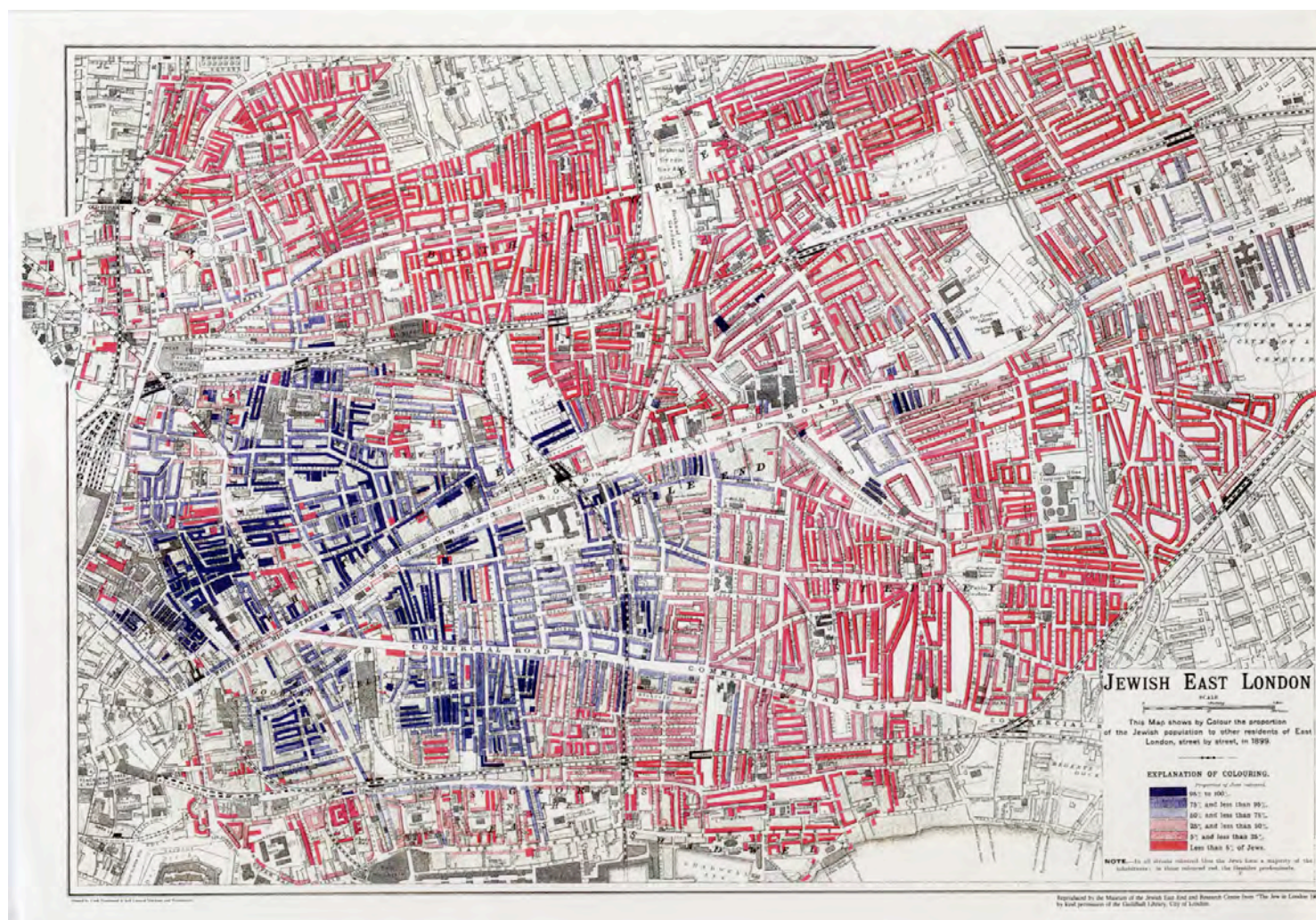


Plate 1: 'Jewish East London' copied from the reproduction by the Museum of the Jewish East End and Research Centre from: Russell, C. and Lewis, H. S. (1901), *The Jew in London*, London, Fisher Unwin. The Museum's reproduction was 'by kind permission of the Guildhall Library, City of London'.

CHAPTER 2

Space, Society and the 'Ghetto'

1. Introduction

The aim of this chapter is to review the current views and theories in the field of this thesis, show where they conflict and to pinpoint gaps in the knowledge of the field. Due to the broad subject matter related to minority settlement theories, it is necessary to embed the architectural theory at the core of this thesis within the wider framework of theories in the fields of human geography and migration studies, since these are the main starting point for most studies of immigrant cluster settlements.

The following section looks at theories about communities and space; it discusses the question of social solidarity and reviews theories regarding the relationship between spatial solidarity and the cohesiveness of minority groups, also considering theories which discuss the impact of space on society and how society can be 'read' in space.

The next section discusses theories regarding migration and settlement and the impact of migration on urban form, due to the tendency of immigrant minorities to cluster in space. This section starts with a review of theories regarding chain migration and then follows with a review of the various theories regarding the causes of clustering, follows with a review of theories which propose that minority clustering can lead to economic integration. Finally the origins of the term 'ghetto' is discussed as an introduction to the last section of this chapter, which reviews the testing of these theories through analysis, detailing methods of describing space.

2. Social Solidarity and its Impact on Space

This section discusses the notion of social solidarity; the question of community. Common parlance today views society as a collection of communities, some are spatialised, such as 'local community' yet others are non-spatial, such as the 'disabled community', or the 'reviewing community'¹. Both types of group are perceived as having common beliefs that distinguish them from others, yet this perception does not account for people belonging to more than one community, nor does it account for the fact that a member of the 'disabled community' might have more in common with his work group, economic class or political group than with people with the same physical problems as his own.

• 19th Century Perceptions of Social Solidarity

Durkheim (1893), who is considered one of the fathers of modern sociology, used the metaphor of the organism to describe society in 'The Division and Labour', in which society was presented as a set of solidarities between individuals. Since social solidarity is a 'moral phenomenon' that does not lend itself to measurement we must seek an external index of solidarity; Durkheim proposes measuring the strength of laws in society, which normally derive from social customs, to classify society's degree of solidarity. He suggests two models for solidarity: the mechanical and the organic. In the first, (typified by pre-industrial

¹ The latter 'community' type was referred to on the BBC programme 'Books and Company' on 1/4/97.

societies) economic activity is contained within a small family group and work and family groups overlap - the rule of law is repressive, since it must cover every aspect of the society's life. In addition, mechanical societies have in common the same ideals and beliefs. In the second model, economic activity goes outside the group - labour is divided and becomes specialised. Thus, in the organic society, law ceases to be all-encompassing, since social ties are more fluid and if one member of society seeks to move in a different direction, he has less impact on the whole. The authority of societal customs diminishes and the laws are weakened. Indeed, as a result of the creation of trade, higher levels of economic activity are necessary and cities are created. He suggests that cities are formed by non-cohesive groups, due to their being comprised of individual migrants:

'.... trades demand cities, and cities have always been formed and recruited principally from the ranks of immigrants, individuals who have left their native homes.' [Durkheim (1893), p. 17].

Durkheim's negative views of the division of labour in society led him conclude that the industrial city causes a weakening of social solidarity; instead of creating a solidarity due to interdependent rights and duties - 'the division of labour... [causes] the ties which bind the individual to his family, to his native soil, to traditions which the past has given to him... [to] become loose'². Rather than returning to the pre-urbanised society, which is impossible, he proposes containing the fragmentation of modern society by creating a code of moral and just rules - but this code can only exist if the conditions of competition are 'equal'. This perception of modern society as a collection of individuals with self-centred motivations seems to preempt current-day theorists on the malaise of modern society. However, other theorists who have followed Durkheim have reached other conclusions regarding the cohesiveness of modern society.

• Is Society Defined by Place?

Theories regarding social solidarity tend to be divided into those that suggest that in the modern city man is free from ties related to place, and those that suggest that social ties are transpatial (independent of space), due to the individual's multiple membership of communities.

One of the key proponents of a theory that society is reflected in space is Park, who together with Burgess and McKenzie, founded the 'Chicago School' of sociology, whose influence from the 1920s was widespread, especially in the United States³. Park et al (1925) also conceived of the notion of urban space as a reflection of the social relations it contains. This was part of a general theory about spatial structure of the city, which came about from their description of the relationship between social relations and spatial distance:

'In society we not only live together, but at the same time we live apart, and human relations can always be reckoned, with more or less accuracy, in terms of distance'. [Park et al (1925) cited in Jackson and Smith (1981)].

Park's and his colleagues proposed in their seminal book 'The City', that the neighbourhood was less significant in urban areas, except in the case of immigrant or ethnic enclaves. Park's group identified the phenomenon of spatial segregation and proposed a relationship between segregation and poverty. Park also proposed the notion of 'encapsulation', whereby the urban individual tends to have overlapping social networks closely tied to his home ground.

The urban sociologist and planner Wirth also came out of the Chicago school. His PhD thesis led to his influential book 'The Ghetto' (1928). It is evident from his early writings, that Wirth views social groups as purely local-territorial artefacts, which do not transcend space, as can be seen in his article, 'The Scope and Problems of the Community', Wirth (1933):

'The localised aspect of urban communities causes the segmentation of urban life, both because the individual has no conception of the overall scheme of urban life and because urban life tends to be extremely segmented, due to the formation of spatially segregated areas which are likely to be sorted according to colour, ethnic heritage, economic and social status, tastes and preferences' [Wirth (1933), p. 70].

² Durkheim (1893) p. 400.

³See Park (1925).

However, in a later paper than that quoted above, Wirth adjusts his earlier thinking about urban communities relating to local place, to propose that cities allow multiple membership of communities, due to the 'physical footlooseness' and 'social mobility' of urban individuals. He suggests that social group membership has a high turnover, due to social mobility, and due to lack of spatial congruence; to some social groups even membership of a local spatial group is unlikely, since the city-dweller is unlikely to be a home-owner, and thus have real contact with his neighbours. These theories are presented in contrast with the pre-urbanised societies, where, Wirth suggests, kinship ties were the strongest social grouping.

The social anthropologist Lévi-Strauss (1953), one of the followers of Durkheim, suggests that community ties, even in industrial societies, are relatively limited. Therefore, modern society is comprised of similar sizes of kinship groups as those of primitive societies. But he suggests that added to these are other types of social ties, such as economic and political, which serve to link between the kinship groups. This model of modern society perceives the kinship groups as 'relatively static' in their marriage ties.⁴ Lévi-Strauss concurs here with the notion of multiple membership of social groups.

The theory of membership of multiple communities is accepted amongst sociologists such as Sack (1980), who maintains that by virtue of living in a place, an individual gains membership of various communities 'In civilisation, a person's domicile frequently determines the person's membership in social organisations... so that being a resident of a place often means being part of several communities'.⁵ However, we see that in the case of Sack, territory is now seen as defining community. The need to defend territorial entities is seen by Sack to be primarily an obligation of the state.⁶

These theories have proponents also in the field of social anthropology. For example, Hannerz (1980) maintains that 'encapsulation' is an urban phenomenon, not only typical of ethnic minorities, but also of people of common working background as well. He concurs with Park's assertion that the city is like a 'mosaic of little worlds which touch but do not interpenetrate'.⁷ Yet Hannerz differs from Park in that he also proposes a type of city dweller who inhabits several worlds at once:

'integrativity is probably the most ordinary way of life in the city... In integrativity one individual's network is spread among domains' [Hannerz (1980), p. 258].

According to Hannerz, these concurrent situations both make use of the size and diversity of the city. Segregation of relationships through encapsulation makes use of the urban network to disassociate one relationship from another, whilst people with integrationist networks, overcome space to fulfil their social needs.

In the field of historical geography, theorists such as Anderson (1971) or Schofield and Wrigley (1986), assert that communities are the aggregate of family units within a specific geographical boundary, although they do account for other social groupings within that boundary. In a similar fashion, the urban historian Mills (1994), in an article on the concept of 'community', suggests that the modern individual might belong to more than one community, and thus to relate to more than one territory: 'home, work, school, professional organisation... are often based in different places, sometimes quite large distances apart'.⁸ He proposes that this differs from the situation in the pre-twentieth century city, where these entities were likely to be spatially congruent. However, he clearly believes that both in the 19th and 20th century cities, the concept of community is hard to define, since the marriage group (related to church membership, for example) may differ in its boundaries from the occupational group (which might relate to cross countryside hiring patterns of casual farm labour, domestic employees and so on).

Underlying many of these theories is a belief that social space has recognisable boundaries. This is a theory that has had significant impact on the analysis and design of cities in recent years. This is discussed in the following section.

⁴ The contrast between anthropological and sociological viewpoints is apparent in these remarks: society is seen by the anthropologist as a collection of different cultural contexts as well as familial contexts. This can be contrasted with the sociologist, who is interested in the motivations and interactions of individuals within the group and sees society as a relationship between the smallest parts.

⁵ Sack (1980), p. 179. The question of defending territories will be covered in greater depth further on in this section.

⁶ Sack (1980), p. 181.

⁷ Hannerz (1980), p. 257, quoting Park, no citation given.

⁸ Mills (1994), p. 275.

• The Paradigm of Spatial Solidarity: Territoriality

The notion that socially cohesive groups identify closely with their surroundings brings forth the theory of territoriality. The theory of territoriality, promoted by urban theorists such as Newman (1972) makes a direct link between space and society; according to this theory, people recognise the limits of their territory and seek to guard it from incursions. This is based on biological theories about the propensity of certain species to seek to defend their surroundings. Newman extrapolates from the biological to the human and proposes that by segmenting urban domestic space into enclosures (in other words, courtyards surrounded by buildings), the territorial aspect will strengthen through the individual's greater identification with a specific locale and thus help prevent crime as strangers (and potential criminals) will be easily recognised.

Anthropologists, such as Lee (1976), have proposed a more complex set of ideas. Richard Lee maintains that social and spatial boundaries do not necessarily overlap; whilst some societies may be open, their territories may be quite well defined, and vice versa: 'The existence of a group and a space necessarily implies the existence of two kinds of boundaries: social and spatial... both spatial and social boundaries are fluid for contemporary hunter-gatherers'⁹. Other anthropologists such as Smith (1990) suggest that the common practise of analogising human occupation of land with the 'territorial imperative' of the animal kingdom is mistaken - territoriality is sometimes overemphasised, and is only part of a much broader association that ties groups together. Indeed, in some societies (such as the aborigines of Australia) the association of individuals with territories is forbidden - as the land is a sacred entity which may not be owned by individuals. According to Smith, territoriality is a social construct that changes in association with different historical and geographical circumstances and where some people may feel ties to a small plot of land, others may identify with a much larger entity.

The theory that people identify with a defined territory has entered into the vocabulary of the social sciences, as suggested by Waterman (1983), stating that the 'neighbourhood is an accepted phenomenon... which has been succinctly recognised by sociologists'¹⁰. Waterman observes that this phenomenon is delimited by the lines of sight 'or some such other regulating factor...' which is defined as a 'group of houses, shops, gardens and other structures and areas...'¹¹. It seems evident that this phenomenon is viewed as stemming from local interactions, yet Waterman also believes that the neighbourhood is comprised of the interactions with individuals 'who often come from other districts'. In other words, the neighbourhood is both a locally and a globally used space. If so, its definition by the social interactions of local individuals seems difficult.

Levitas (1978), is another proponent of 'defensible space', suggesting a varying need for enclosure, dependent on the social group that the space contains 'It seems possible that where social boundaries are clear and well supported by other institutions in the system, the need for physical boundaries may diminish. On the other hand, where the possibility of social exchange among two boundary systems is increased by development of crosscutting organisations or by the presence of superordinate authority, a system of physical boundaries may emerge to affirm and emphasise separation'.¹² Elsewhere, he introduces the Durkheimian notion of the need for moral law in the modern city by explaining the failure of modern slums: 'the system of overlapping relations, which appear to be necessary to create a moral order, does not exist in the slums'.¹³

The anthropologist Hannerz (1980) seems to concur with this idea, and although (as mentioned in the section above), he believes that the city consists of overlapping social networks, he views the spatial segmentation of city space as enabling social relations: 'where fewer outsiders pass through the area and distract perceptions, residents may have a surer sense of who actually belongs'¹⁴ - this statement seems to allude quite strongly to Oscar Newman's 'defensible space'. Moreover, it introduces the notion that the separation of local from stranger will improve the cohesiveness of the local society. Similarly, Chisholm (1990), contends that 'natural barriers' such as railways and canals facilitate the partitioning of space so that

⁹ Lee (1976), p. 74.

¹⁰ Waterman (1983), p. 56.

¹¹ Op. cit.

¹² Levitas (1978), p. 230.

¹³ Op. cit. p. 233.

¹⁴ Op. cit. p. 263.

residents of a so-defined area 'know their neighbours, and are aware of the presence of strangers whose intentions may be untoward. The control which one has over private space is in some degree extended to the immediately adjacent public space'.¹⁵

Hillier and Hanson's theories of society and space (1984), which evolved in the 1970s, led Hillier and Hanson to study the concept of 'community'. In contrast with the theories reviewed above, Hillier and Hanson propose that the 'sense of place' which is celebrated by the admirers of old cities, is due to the openness created by a street system which is constructed by an 'intelligible' system, rather than to a sense of belonging to a defined territory. By 'intelligible', they mean that the spaces of the local system, the most private sections of the neighbourhood, are consistently related by lines of sight and access to the larger scale space structure. This is defined as 'the degree to which what can be seen and experienced locally in the system allows the large-scale system to be learnt without conscious effort'¹⁶. The concept of 'intelligibility' is paramount to the Hillier and Hanson theory of urban spatial organisation. An intelligible street system means that users can distinguish between the larger pattern of space and the local system. By analysing the intelligibility of a system, Hillier and Hanson believe that we can also understand the social process of the city, by studying the structure of space.

A further conjecture on community is made in the term 'virtual community'¹⁷, commonly used by Hillier and Hanson, who maintain that space contains the potential for encounter and thus the virtual community is a possible network of co-presence where people might know each other. Beyond interaction itself, the virtual community is an agent of possible or potential encounter, a measurable form with structure and shape. If we can measure the shape of urban space, we can understand its potential for interaction. However, Hillier and Hanson maintain that the associations contained in space do not necessarily correspond to a definable territory and so contradict Newman's theories (1972) by proposing - in an article 'Can Architecture Cause Social Malaise'¹⁸ - that the co-presence of people on the streets prevents crime and it is in the type of urban areas where locals are separated from 'strangers', such as housing estates, that pathological, crime ridden activity occurs.

More recently, Simon Chu (1999) has proposed, following a study of the occurrence of crime in a range of housing types in England, that property crime vulnerability is more likely to occur in those spatial configurations of the type promoted by the theory of 'territoriality':

'The findings from this research provide empirical evidence for scepticism on the concept of "territoriality" and "defensible space" put forward by Oscar Newman, and suggest that, other things being equal, property crimes tend to cluster in those globally or locally segregated areas, particularly in those unconstituted enclosed clusters which Newman considered to be the key to increase local surveillance and hence to exclude casual intrusion by non-residents. [Shu (1999) abstract of conference paper].¹⁹

Hillier also writes that the effect of the creation of housing estates was to:

'remove the least privileged groups in our societies from the public realm, and consign them to zones which no outsider entered without a strong reason, and which were therefore known only to their inhabitants...' [Hillier (1996), p. 436]²⁰.

Hillier's quote raises the issue of the spatial segregation of the marginalised in society, which are invariably considered as part of the more general issue of the 'outsider' in society. The following section reviews theories regarding the social solidarity of minorities in society.

¹⁵Chisholm (1990), p. 36.

¹⁶ Hillier (1996) p. 214.

¹⁷ Hanson (1989) explains the term: ' "community" because it is a form of group awareness, 'virtual' because it has yet to be realised through interaction among its members'. This term probably follows Susanne Langer in her book 'Feeling and Form: a theory of art', where she states: 'Architecture... is a total environment made visible... and as the actual environment of a being is a system of functional relations, so a virtual "environment", the created space of architecture, is a symbol of functional existence.' [Langer (1953) p. 98].

¹⁸The article dates from the 1980's and is also included in Hillier (1996).

¹⁹Simon Chih-Feng Shu: 'Housing Layout and Crime Vulnerability'; Space Syntax - Second International Symposium Brasilia, Brazil 29 March - 3 April 1999.

²⁰These ideas were first published in 'Against Enclosure', Hillier (1987).

• The 'Outsider' in Society

Theories differ regarding the socio/spatial solidarity of outsiders (i.e. minorities or non-conforming groups) in industrialised societies. Some contend that the modern city allows for the easy absorption of foreign individuals, whilst others contend that the tendency for minorities to cluster leads for them to be separated from the host society, even in the modern city.

It could be contended that the precursor of modern-day conceptions of the outsider in society is Weber (1914), one of the key theorists of society that followed Marx. Max Weber's writings (which were contemporaneous with those of Durkheim, at the turn of the 20th century) deal with the question of class in some detail. Unlike Marx, Weber distinguishes between class and status; whilst the former is directly related to the economic activity of the individual and is not necessarily a conscious belonging, status is related to a group which has a common position in society of which they are aware: 'In relation to classes, the status group comes closest to the "social" class and is most unlike the "commercial" class'²¹ In his writings about community, Weber contends that the 'outsider' in community has social solidarity due to outside pressures, rather than internal organisation. The outsider's choice of residential location is the outcome of stratification by status, normally allied to economic restrictions:

'For example, in many Hellenic cities during the "status era" and also originally in Rome, the inherited estate... was monopolised, as were the estates of knights, peasants, priests, and especially the clientele of the craft and merchant guilds. The market is restricted, and the power of naked property *per se*, which gives its stamp to class formation, is pushed into the background'. [Weber (1914) in Giddens (1971), p. 167]

The economic link (other restrictions may be due to religion or caste) means that status restrictions may ultimately have an impact upon class restrictions so that groups who are restricted in their economic activity (such as Jews) may have a separate social status.²² This notion of the Jew as outsider due to economic restrictions (as well as religious ones) is very common and can be seen for example in the book 'The Ghetto', in which Wirth (1928) reveals his perception that the spatial segregation of minorities, especially in the case of the Jews is due to restrictions on their economic mobility :

'his mobility, his adaptability, his flexibility.'... [In the rigid structure of a society in which...] 'everyone was tied to something - the soil, the feudal lord, the house in which he and his ancestors live, or the Guild of which he was a member... the Jews found a strategic place.' [In addition to which,] 'the Jew, by the nature of his contacts - largely of a categorical and secondary type - was especially fitted to become the commercial individual and less fitted to become the artisan, who requires close and intimate personal contacts with his clientele' [Wirth (1928), p. 24, 78].

The theory of economic restrictions leading to the lack of residential mobility is also proposed by the urban geographer Harvey (1973), who analyses urban form via a critique of capitalism. Harvey states that the correct theory of economic segregation is that: 'poor groups must, of necessity, live where they can least afford to live'²³ since they have little choice, due to the structure of residential 'inequality' and their low income, but to live in areas with high rental cost - typically city centres.

Harvey also refers to the question of ethnic group status in his writing and suggests that the counter-balance to the 'dehumanisation' by the market process of human relations is through the 'neighbourly warm-hearted reciprocity' to be found in communities with common ethnic or religious identifications or those who have suffered economic deprivation²⁴.

Harvey's analysis, based on reinterpretations of Engels, does not consider the many strata within the definition of poor - some poor may be more economically and socially mobile than others. In addition, his theory considers all cities equally, whilst there are obvious examples where this model is reversed, such as

²¹Economy and Society, (1914) (1968 edition, New York), quoted in Giddens (1971), p. 166.

²²This interpretation of Weber (1914) is made by Giddens (1971), pp. 166-167.

²³Harvey (1973), p. 137. Harvey's Marxist approach is also evident in his proposal for a solution to economic 'ghettos', which is to eliminate private property and to formalise residential change through government dictats, whereby, all old housing becomes rent-free: 'Our objective is to eliminate ghettos... If we eliminate [the free market], we will presumably eliminate... ghettos' [pp. 137-138].

²⁴Op cit., p. 280.

Paris, in which the suburbs are where poverty clusters are located.

Others, such as Johnston and Herbert (1978), concur with the notion that individuals avoid conflict with dissimilar neighbours by forming coalitions to protect their interests; the notion of community being a result of common ground against a different neighbour. Here the attitude towards the cohesive neighbourhood is as potentially a positive thing:

‘one such coalition is the socio-spatial unit, the set of individuals and households with similar aspirations and attitudes which occupies a certain ecological niche within the urban residential pattern - the social areas’. [Johnston and Herbert (1978), p. 8].

In the field of human geography we see more discussion on the potential pathology of ethnic clusters. In this case there is a frequent assumption that unified groups or communities lead to spatial segregation. Some scholars, such as Dennis and Daniels (1981), propose that the whole concept of ‘community’ and the allied study of residential segregation needs to be rethought, both because of the unreliability of the data used and because of misconceptions lying behind the supposed congruity between space and society.

The social anthropologist Sibley (1992) is amongst those that believe that it is easier for ‘outsiders’ to live in the industrial city, which lacks rigid barriers between sub-groups ‘In weakly classified space, minorities will be less visible, they may not be identified as non-conforming and, consequently, the potential for conflict over the use of space is reduced...’²⁵. On the other hand he suggests, strongly classified space accentuates the differentness of ‘outsiders’ and leads to their subsequent rejection. Sibley’s theories link well to Hillier’s theories regarding the pathology of modern housing estates, which as quoted in the above section, tend to separate out locals from strangers.

Hillier maintains:

By... ‘exaggerating [the co-presence of locals]... by spatial design, and at the same time eliminating the leavening of strangers as found in ordinary streets, seems far more likely to reinforce ... avoidance [with] more investment in the control of over-pressing neighbourliness’. [Hillier (1996), p. 436]²⁶

Hillier is criticising here the notion of neighbourliness, which is promoted by theorists and designers who contend that enclosing weak or marginal communities promotes a greater ‘sense of community’ amongst them. Instead, he suggests that the best way to solve the problems of housing estates is to reintegrate them spatially into the urban network so that spatial segregation does not promote social segregation.

This section has suggested the possibility that space can have an impact on the relations between the individuals it contains. The following section discusses this notion in greater detail.

• Theories Regarding the Impact of Space on Society

One of the commonest reasons given for the cohesiveness of communities, especially ethnic minorities, is their propensity to cluster in a manner which promotes high rates of interaction. In most cases the high density of the clustering is itself seen as the main ingredient in successful group cohesion. Only occasionally is spatial configuration alluded to and then, normally at the level of the urban unit.

The notion of the street space as the place in which community relations take place has been promoted by early social observers such as Whyte (1943), who through his study of Italian ethnic enclaves, suggests that the street space promotes easy interaction between the local society members.

This view of space as having an impact on the cohesiveness of society is maintained by the sociologists Young and Willmott (1962), who studied communities in Bethnal Green in the East End of London and after their move to a new housing estate in Essex. They found a strong congruence between environment and the pattern of family relations - whereby the relative low density of the new housing estate had broken the strong cohesiveness of family and the high rates of kinship relations that had existed in the high density streets of the East End.

²⁵Sibley (1992), p. 116.

²⁶These ideas were first published in ‘Against Enclosure’, Hillier (1987).

The notion that the street is central to creating cohesiveness can also be seen in the review of urban communities by the sociologist, Michelson (1970), who suggests that the social pattern of group integration and high rates of kinship activities is supported by the 'pattern of streets' (a phenomenon he finds especially prevalent amongst immigrant groups). However, other than alluding to the mixture of land uses, his descriptions are spatially imprecise. It is also notable that Michelson believes that space can have an impact on society (see italics below):

'From their windows, people could easily view passers-by, and they were close enough to hail them if desired... What they did value, however, was the combination of type of building and siting of buildings relative to each other, the streets, and the commercial land uses. *This combination brought people into frequent, spontaneous, and intense contact with their relatives.* It strongly supported their style of life' [Michelson (1970), p. 21]²⁷.

The social anthropologist Bourdieu takes a similar tack, and proposes that there is added strength given to a community if it is found to be spatially cohesive. Bourdieu has postulated that strong ties between family and neighbours, maintained by close proximity, strengthen the integration of the social group - proximity is likely to generate encounters, and make them more probable whilst distance is likely to do the reverse:

'...unity of residence contributes to the integration of the group... the constants for a network of relationships... comprises not only the total of the genealogical relationships kept in working order... but also the sum total of the non-genealogical relationships which can be mobilised for the ordinary needs of existence.' [Bourdieu (1977), pp. 38-40].

The common thread between these study subjects is that they deal with working-class groups; theorists such as Young and Willmott suggest that working-class society differs from middle class by the high rates of social contact between kin.

In contrast with this, some theorists propose that there is a crudity in seeing a 'one to one' relationship between social form and social action, as suggested by the French philosopher Henri Lefebvre, whose principle studies looked at French rural and peasant societies. In his book 'The Production of Space', Lefebvre (1991) analyses the process of the creation of social space through a linguistic and philosophical framework that takes account of the Marxist approach to society²⁸ (it could be said that the Marxist view of space and society is that economic access to capital is a choice constraint on physical movement). He proposes a more complex relationship between space and society than the general acceptance that social space is a product of society. Society cannot be 'read' through space easily, since it is an abstraction of thought processes, but 'social space works (along with its concept) as a tool for the analysis of society':

'It is not the work of a moment for a society to generate an appropriated social space in which it can achieve a form... a social space to which that society is not identical... Some would argue that space is prohibition... the dislocation of the most immediate relationships... and, lastly, the never fully achieved restoration of these relations in an 'environment' made up of a series of zones defined by interdictions and bans'. [Lefebvre (1991), p. 34].

We see here in a way a return to the Durkheimian concept of society constructed by restrictive rules, yet overall, a belief that space is a complex construct resulting from the form of society.

Unlike the theorists quoted above, who tend to analyse space and society as one, the architectural researchers Hillier and Hanson (1984) deal with the morphology of space itself. Believing that space is not passive, but plays a role in reproducing society, they study the form of a range of 'primitive' and modern societies. Hillier and Hanson see society as a spatial entity, but instead of viewing society as a cohesive whole, view it as a composition of spatio-temporal individuals.

In 'The Social Logic of Space', Hillier and Hanson (1984) state that human societies are spatial phenomena; they write that societies are spatialised through mutual encounters and exchange of

²⁷The view that space can have a positive affect on behaviour is central to many theorists, including many modern architects - 'architectural determinists' - who perceive architecture as a potential cure for society's ills.

²⁸'Today more than ever, the class struggle is inscribed in space' Lefebvre (1991), p. 54. According to David Harvey, in the Afterword to this book, Lefebvre's theories were shaped by the First World War and the Russian Revolution and his later participation in communist groups.

information. Hillier and Hanson also state that society arranges space through the physical means that mark the boundaries of the society, thus creating a definite pattern:

'spatial order is one of the most striking means by which we recognise the existence of the cultural differences between one social formation and another, that is, differences in the ways in which members of those societies live out and reproduce their social existence.' [Hillier and Hanson (1984), p. 27].

The need for a theory of space that will solve the requirement to integrate city space and still maintain the distinctiveness of local areas, is the background to the work of Hillier and Hanson (1984), whose theories propose a new way of defining the 'traditional' (western) city. In an article written in 1993, Hillier et al define the main characteristic of 'traditional' cities as having 'marginal separation - linear integration' (or sometimes the 'two-step logic'). They maintain that the principle that governs the design of London is that the local structure is only a few steps away from the main linear 'integrators' (i.e. the main street structure), thus the inhabitant/stranger relationship is maintained, creating two sets of encounters, one at the large scale of the city and another at the level of the more local areas.²⁹

This section has reviewed various theories which relate to community and space and has touched on the question of ethnic enclosures (or 'ghettos'). The following section concentrates on the concept of 'ghetto', starting with a review of theories about the spatial impact of migration.

3. Space, Society and The 'Ghetto': Theories on Migration and Settlement

The following two sections review theories pertaining to the causes of clustering by choice of immigrants and minorities and the impact of clustering on the groups in question. After reviewing theories on migration and settlement, the last section reviews the origin of the term 'ghetto' in the enforced enclosure of the Jews in pre-19th century Europe and the manner in which this concentration by force is said to have had an impact on Jewish society.

There are two principle areas in the field of migration studies that are of interest to this thesis: first, the spatial impact of migration - the pattern created by the process of migration or in other words, the manner in which the causes of migration affect the final pattern of settlement; and second, the causes of clustering and the relationship between immigrant settlement and the spatial structure in which it takes place.³⁰ These two areas of study are reviewed in the following two sections.

3.1 The Spatial Impact of Migration: Chain Migration

The spatial impact of migration is believed to be closely connected to the causes of migration itself - the 'impetus to move'. In migration research the state of the country or place of origin of a migratory group is studied in order to discover the cause for the decision that was made to move. This causal approach, which is common to most migration studies, is criticised by Lee (1966), who emphasises 'the need for caution when interpreting their results, since we can never specify the exact set of factors which impels or prohibits migration for a given person...'³¹

The spatial impact of migration is principally a geographers' concern. Their interest is in the manner in which migration is inherently a question of population redistribution; according to White and Woods (1980), this impact is viewed as affecting the demographic, social, economic and political attributes of the migrant population, many of which have spatial implications. Current views on the pattern of migration distribution in Europe are that its form is due to specific movements of populations with common backgrounds, from specific areas. In all of these theories, the most important element is that of migrant selectivity - the question of which element of the population is reduced by movement, how does the migrant population - being of a particular character, influence the migratory destination and, most importantly, what is the form that the migrant population takes upon arrival at the destination.

²⁹ Hillier, Penn et al, (1993), p. 35.

³⁰ See White and Woods, (1980), p. 43.

³¹ Quoted in Lewis (1982), p. 99.

The model of chain migration is normally used to describe the type of move where initial migration is made by primary movers, who supply information to secondary migrants, who follow later. This pattern of migration is typically associated with the formation of immigrant enclaves. An example of this perception can be seen in the newspaper reports by Jacob Riis from 1890-1900, which reveal the development of the Lower East Side New York slums in the late nineteenth century (which was a time of mass immigration of East Europeans, amongst them many Jews). Riis describes how young men were attracted to the idea of making initial attempts of settlement on their own, with a view to preparing the ground for other members of their family³². It is notable that this is a phenomenon believed to be common for Jewish migration, as seen in Brewer (1892), in a newspaper letter about the Jewish East End of London (*italics not in original*):

'I was present at the coming in of a German boat with some forty Jewish immigrants, and stood by while their luggage was examined; there was not much of it... *Most of them were met by relations already established here*; three only were without addresses...' [Brewer (1892), p. 71 and 75.]

Another aspect of the theory of chain migration is the need for the first wave of migrants to maintain links with the 'old country'. According to Drake (1994), it was unusual, for example, for the Greek Cypriots of 20th century London to send all the brothers of a family at once. 'There was thus a constant flow of information through both letters and visits'³³.

The importance of information flows in ensuring a successful migration and in establishing a link, or even a form of organised migration is the subject of numerous studies. One example of this can be seen in the study by Desai (1963) of the importance of chain migration for Indian immigrants to Britain. Desai studied the origins, social networks and employment structure of Gujarati immigrants in Birmingham. He found that the majority of this group had been helped to migrate by a core group of migrants that had come ahead of them and who subsequently helped the larger group to find jobs and accommodation and generally smooth the migration process. 'The network of communication, in terms of the flow of information and the sending of remittances from Birmingham to India, was of great importance in establishing a clearly defined migration stream'³⁴.

• Secondary Settlement of Immigrants

Some studies of immigrant settlement look at the second stage of settlement, which normally comes after immigrants have established themselves economically; or at least had an improvement in their economic situation. Theories differ as to when the change occurs and suggest that this may depend on the degree of internal cohesiveness of the immigrant community.

Studies of secondary settlement of immigrant communities suggest that these follow a regular pattern, of an inward frog's leap to a better area [e.g. Kalman (1980) and Pooley (1978)]. These studies have suggested that when the second stage of migration occurs, the existence of the cluster is less apparent. This may be due to the fact that it is less essential. It may also be linked to the move from a preponderance of retail and small-scale industry into the professions, which need not cluster so closely, and which are not as dependant on a niche market as the shops are (the immigrant shops might initially be serving a known market - other immigrants). The more dispersed clustering by ethnicity might be due to greater assimilation. It might also be due to the type of housing typical of the middle-class (if attained by the secondary migrants), which is inherently more dispersed than the first stage of migration pattern of housing³⁵.

Other studies suggest different patterns to movement from the initial area of settlement. For instance, a study of Irish in Britain by Pooley (1977), also identifies a specific pattern of dispersal: his study identified a dense clustering of poor and unskilled Irish immigrants in the central and dockside areas of Liverpool, yet also showed that the higher economic classes of Irish born people tended to be spread more evenly over the outer suburbs. In a similar study, Pnina Werbner (1994) in her analysis of the dynamics of Pakistani immigrant settlement patterns in Manchester, proposes a 'fan movement' outwards from the original locus

³² Jacob Riis writings appear in Cordasco (1968). See p. 42.

³³ Drake (1994), p. 93.

³⁴ Desai, (1963) in White and Woods, (1980) p. 37.

³⁵ A recent article by Cesarani (1998) contradicts perceptions that the move to the suburbs occurred in parallel to a move to the middle-class by the Jews of the 20th century: 'for them geographical mobility did not signify upward social mobility'. Instead, he suggests that the move to the suburbs and white collar jobs was in small numbers, and only through the economic support of the extended family.

of settlement, into the suburbs. She also notes that the dispersal in the suburbs lessened the degree of social contact at the initial stages, but this problem became less significant as more of the immigrant group members moved out to the same location.

The dispersal in the suburbs is seen differently by some studies, such as Lees' (1969) analysis of the Irish in London, who suggests that despite the apparent dispersal, this can be contained in a relatively small number of locations.³⁶ In a similar study, on the Irish in Leeds, Dillon (1973) maintains that: 'though the Irish were dispersed over many township wards, 80 percent lived in just three of them'³⁷. And, Waterman (1989), in his study of the dispersal of the Jews in London, maintains: '...there are areas and neighbourhoods in which the Jews form substantially larger proportions of the overall population.'³⁸

3.2 The Spatial Outcome of Chain Migration: Clustering

'It has been noted by historical geographers, as by urban sociologists and anthropologists, that members of minority ethnic groups often congregate in discrete sectors or clusters in urban areas, a distribution that can also influence their later movements... The resultant studies of residential patterns and of the effects of how and where people decide to move, have led to interesting - but challenging - theories about trends and variations' [see Pryce (1994), p. 163].

A review of literature on immigrant clustering reveals a varying scale of opinions on the causes of this spatial phenomenon. The historical geographer Carter (1983), writing about Irish immigration to Britain, maintains that this phenomenon first came about as a result of the massively increased mobility in the nineteenth century, which caused a greater mixing of population, and the development of the concept of 'segregation'.³⁹

The causes of clustering by minority groups are normally assigned to exclusion of a minority population caused by prejudice, or to blocks of property being retained for certain labour groups. Since the Jewish population of the 19th century was not usually in the employ of large companies (preferring smaller, family owned businesses which were invariably also Jewish owned), this exclusion was especially prevalent amongst this group, since many Jews lodged with co-workers of the same industry. Clustering due to employment opportunities is explained by Wirth (1928), who cites the commonest reason for the location of the Jewish, and other immigrant quarters on the edge of the central business district, as being that in the late nineteenth century unskilled employment was still generally concentrated in that area. Immigrants, especially when hired casually, need to live as near sources of employment as possible. Other sources who cite clustering by occupation as a principle cause are: Fishman (1988), p. 61; Hersch (1969), pp. 515-516. Other causes can be prejudicial (exclusion from certain areas), which kept late 19th century Wapping, for instance, free of Jews⁴⁰; and restrictions due to rental inflation, as suggested by Englander (1994), who writes about the Jewish settlement in East London: 'the assertion of Jewish territoriality was contested street by street by an indigenous population that was alarmed by the inflationary influx on rented accommodation'⁴¹.

Following is a review of theories regarding the principle causes of clustering:

• Religious causes of clustering

According to Raymond Kalman, the most significant cause of clustering of the Jews in England has been religious restrictions, such as the need for a quorum for the thrice-daily prayers which invariably leads to the establishment of a regular place of worship. Many of these small synagogues then became centres for religious study and general meeting places of the community. 'This pattern is unchanging over the centuries

³⁶ Lees (1969), pp. 365-366.

³⁷ Dillon (1973), p. 163.

³⁸ Waterman (1989), p. 17. Waterman, a geographer who has written extensively on Jewish settlement in Britain and Eire and on Irish settlement in Britain, typically uses statistical data (such as the census) to map the spatial location and residential move patterns of these groups.

³⁹ See Carter, (1983) pp. 189-201.

⁴⁰ Russell and Lewis (1900), p. 20.

⁴¹ Englander (1994), p. 64.

and enables us to define with accuracy where Jews, or where the majority of Jews, have decided to settle.⁴² Moreover, the meeting in the synagogue is seen as the outcome of strong connection between the Jews and their co-religionists from abroad:

'The Jews of the Middle Ages certainly had more contacts and more varied and extensive contacts than their Christian neighbours... Particularly in the synagogue we find the centre of thought, the meeting place where strangers often dropped in to tell of what went on in distant lands. The Jewish communities thus came to share the life of their distant co-religionists...' [Wirth (1928), p. 36].

Immigrant clustering around the place of worship is not exclusive to the Jews; we see similar examples amongst the Welsh of London and Liverpool in the 19th century, where the non-conformist chapel served as the focal point of the community⁴³. However, according to Drake (1994) whereas for the Jews, clustering was frequently linked to country or town of origin, for the Welsh it was more 'by nature of an ethnic bond'. Likewise, the Greek Cypriots also tend to cluster around their place of worship, the Greek Orthodox Church. For example, the Greek Cypriots of 20th century London are 'supported by a network of churches, political groups and other associations'⁴⁴. It is noted that once a Christian minority group has established a church, they are less likely to move away from the church catchment area. However, studies of Jewish settlement suggest that the place of the religious institution in the ethnic community is more strongly spatialised in the case of the Jews, who are limited to walking distance from a synagogue, the need for weekly visits to a ritual bath and the additional need to be near kosher⁴⁵ shops (all of which require a certain number of customers in order to be economically viable:

'The segregation of the Jews can in part be considered not a result of external pressure but due to needs arising from their own religious customs, particularly their own ways of preparing food, the demands of attendance at a synagogue and the need to take part in the various aspects of communal life...' [Carter (1983), p. 180.

Jewish religious solidarity may be said to be reinforced by the up to thrice-daily synagogue meetings, the weekly Sabbath celebrations and the numerous feasts and fasts, which impose a separate and highly structured order on Jewish society. Numerous sources, such as Israel Cohen, maintain that the practice of religion, especially Orthodox Judaism, with its multiple rules, rigid structure and strong adherence to the rhythms of the calendar, all serve to unify and strengthen the Jewish society, especially as the synagogue 'forms the pivot and centre of communal life throughout Jewry, and its establishment is followed by the growth of a cluster of other institutions, each answering some definite social need or aspiration...' ⁴⁶

The suggestion that religion acts as a cohesive element for societies is addressed by the sociologist Giddens (1984), who writes that the spatial aspect of society acts as an anchor, through the co-presence of its members; 'the routines of day-to-day life are fundamental to even the most elaborate forms of societal organisation.'⁴⁷ Russell and Lewis (1900) maintained that the continuance of modern Jewish society was wholly dependant on the maintenance of religious practice⁴⁸, yet modern studies have suggested that in some cases cultural practice and family solidarity are sufficient to maintain the unity of the minority culture, albeit to a lesser degree. For example, the study by Dahya (1974) of Pakistanis in industrial societies of Britain, suggests that immigrant communities use communal institutions for transmitting the immigrant 'culture, values and identity' to the second generation.⁴⁹ And in a study of modern suburban Jewry in London by Waterman and Kosmin (1987), it has been suggested that despite greater economic success, there has been a conscious effort by this group to retain cultural distinctiveness. Thus, although the Jews are visually little different from their host community, three or four generations after immigration, attachment to certain aspects of their culture remains strong.

Another example of Jewish unity, is in the Jews' use of a lunar calendar, in contrast with the solar Gregorian calendar found in most western societies, this means that the dates of the Jewish calendar do not

⁴²Kalman (1980), p. 8

⁴³ See Drake (1994), p. 54.

⁴⁴ Drake (1994), p. 93.

⁴⁵Kosher = ritually approved food (lit. fit to eat).

⁴⁶ Israel Cohen (1914) *Jewish Life in Modern Times*; London & New York, p. 23, in Wirth (1969) p. 52.

⁴⁷ Giddens (1984), p. 64.

⁴⁸See Russell (1900), p. XVI.

⁴⁹ Dahya, B. (1974) 'The Nature of Pakistani Ethnicity in Industrial Cities in Britain' in A. Cohen (Ed.) *Urban Ethnicity*, Tavistock Publications Ltd., London.

work in tandem with those of their host societies but are instead tied into the seasons of the land of Israel. The temporal distinction of the Jews from their host society may contribute to the perception of Jewish society as an exclusive entity, especially as it has an impact on their working patterns such as the irregular timing of festivals and the Sabbath. Bourdieu confirms the significance of temporal distinction, stating:

'The reason why submission to the collective rhythms is so rigorously demanded is that the temporal forms or the spatial structures structure not only the group's representation of the world but the group itself, which orders itself in accordance with this representation'. [Bourdieu (1977), p. 163].

Cohen (1989) also proposes that the ritual of religion can reinforce the separation of the group from the outside world. When discussing Pentecostals in central Newfoundland, he notes that the group conducted itself as a closed community, with separate schooling and social events, concentrating in a 'discrete residential section'. Moreover, through distinctive religious practices (public confession) the social boundary was asserted, creating a 'bond of solidarity among the membership'.⁵⁰ Cohen also suggests that ritual is important in reinforcing the social boundary. He points out that social anthropologists, when studying ritual, have discovered that it can be used to reinforce a social boundary that is only visible to the members of that society; 'although [the boundary] may be unintelligible or even imperceptible to the outsider, it serves to express to the member the salience of his social boundaries'.⁵¹ Thus, the ritual of religion could be used to reinforce societal boundaries, even if they have no physical entity from the point of view of the outsider. The boundary can also be defined by the non-conformity of minority groups, for instance the social anthropologist Sibley states that boundaries are the key to understanding 'outsiders' - 'outsiders can be defined as those groups who do not fit dominant models of society'.⁵²

• Self-Help causes of clustering

According to Wirth, the most basic form of solidarity in the Jewish community is the family group:

'In this inner circle deep bonds of sympathy had been woven between the members through a colourful ritual. Here each individual, who was just a mere Jew to the world outside, had a place of dignity, and was bound to the rest by profound sentiments' [Wirth (1928), p. 24].

Other forms of self-help take the form of charitable organisations within the community, which are both an obligation under Jewish law, but also due to the belief, such as in the case of the established community of Jews in late 19th century England, that if the large influx of poor immigrants becomes 'dependent on state funds', this might have an impact on their position.⁵³

Incidence of self-help as well as the use of the place of worship as the distribution point for charity can be found in other immigrant communities, as seen in a study by Boal (1978) of 'New Commonwealth' immigration to Britain, which maintains that the Sikh temple remains open at all times for poor members of the community requiring food and shelter.⁵⁴

Another aspect of clustering according to country of origin, is the theory that this allows for the maintenance of connections made in the country of origin - leading to greater self-reliance. This can be seen in the records of Beatrice Potter, who shows that in the East End of London, Jews formed into associations, called Chevrot, which were 'based on ties of relationship or friendship'.⁵⁵ The purpose of these associations was to combine the functions of a benefit club for times of sickness and death, but these also served for organised worship and study. The associations were linked to small prayer groups, which were a marked contrast with the established synagogues of the long-standing Jews of the area.

⁵⁰ Cohen (1989) pp. 61-62.

⁵¹ Op cit., p. 44.

⁵² The religious boundary can occasionally have physical reality, as evidenced in the *eruv*, a symbolic wall constructed by wire slung between posts that is occasionally built around an area by religious Jews who wish to make the Sabbath less restrictive (since in Jewish law certain prohibitions don't exist within walled cities).

⁵³ Booth (1902), p. 52.

⁵⁴ Boal (1978), p. 63.

⁵⁵ Potter (1889), p. 199. Beatrice Potter was one of Booth's researchers into his survey into poverty in London at the end of the 19th century.

The notion that self-help is vital in the first stage of migration⁵⁶ is one applied to all immigrants, not only Jews. Boal (1978) describes the study conducted by Hiro, of immigrants in Britain: 'Hiro refers to a common tendency among immigrants to stick together due to the unfamiliarity and insecurity that they feel on arrival in a new country'; he claims that the West Indians in England are no exception to this.⁵⁷ Similarly, Lees (1969) in her study of Irish immigration to England in the 19th century suggests that familial cohesion and self-help existed within this group⁵⁸:

'Less than 3% [of unmarried migrants] moved into English households, and very few unmarried migrants chose either to live alone, to set up housekeeping with friends, or to move into a lodging house. Usually, they moved in with Irish families of their acquaintance, possible friends from home or distant relatives.'
[Lees (1969), p. 377]

However, unlike the results of studies of other immigrant groups, Lees found that self-help amongst the Irish was limited to kin and was reflected in taking in lodgers from the same family, rather than the creation of extended family groupings in the same house - the latter was at the same scale as the majority population.⁵⁹

It should be noted that current research is increasingly involved with the viability of immigrant communities. Such studies point to the fact that immigrant communities are not necessarily as socially deprived as first seen. Sociologists such as Young and Willmott (1962) and Michelson (1970), suggest that the urban ghetto might actually work to reinforce social relations amongst the poor and amongst immigrant populations and in studies of Third-World communities such as that by Janice Perlman (1976) of shantytowns in Rio de Janeiro, it is suggested that the community, first perceived as fragmented, possesses close-knit ties. Such cohesion of the minority population is perceived now as adding to its political strength, as can be seen in Boal (1978), who suggests that the ethnic enclave can be a tool to greater political influence, if the minority group is clustered in a singular voting district. However, clustering does not necessarily lead to political power, as can be shown by Waterman (1989), in his geographical study of the dispersal of the Jews in London, maintains: '... there are areas and neighbourhoods in which the Jews form substantially larger proportions of the overall population... However, even in these areas, at the scale of the ward... the Jews consistently fail to constitute an [electoral] majority.'⁶⁰

• Economic causes of clustering

One of the features of the link between clustering and economic factors that is proposed by migration theorists, is the clustering by country of origin. They propose the theory that clustering according to occupation is an indication that immigrants are using the trades learned in their country of origin. According to Pryce, 1994, this is a theory which ties in with the 'chain migration' model of migration, according to which the sources of information used for trade are mainly based on personal contact. The destination tends to be very specifically located spatially, often confined to particular streets, and is just as strongly linked to the point of origin - in this way strong cohesiveness is created among the migrants of this type, who tend to have similar backgrounds, outlooks and even occupations. However, one cannot necessarily read this model in reverse; that if there is a parallel clustering of occupation and country of origin, that the migrants have brought with them specific skills and trades from their country of origin. The reason for this is that there are many instances when occupations are discarded upon arrival at the migration destination, yet clustering by country of origin is still maintained. See for instance:

'...strange as it may appear, the immigrant's future is more or less determined by the sort of trade done at the town where he lands or arrives. He may become a tanner or a dyer in Hull, and have a different ambition from what he would have if he landed at, say Liverpool, Glasgow, or London.'⁶¹

⁵⁶ See for instance Waterman's identification of a first stage of 'mutual support', in the migration process, in the above section.

⁵⁷ Hiro, D. (1973) *Black British, White British*, Penguin Books, Harmondsworth, Middlesex, in (Boal, 1978), p. 62-63.

⁵⁸ Lynn Lees is an historian specialising in the history of the Irish in the 19th century, with special reference to their residential patterns, using primary data for this purpose.

⁵⁹ It should be noted that in his study of the Irish, Welsh and Scots in Liverpool in 1871, Pooley, (1977) finds that of all three groups, the Irish settlement conforms the most to the model of 'ghetto' segregation.

⁶⁰ Waterman (1989), p. 17.

⁶¹ Smith, J.: 'The Jewish Immigrant', *Contemporary Review*, LXXXVI (1899), p. 426, describing Jewish

In parallel to theories regarding the clustering of occupations amongst immigrants, many theorists propose that one of the ways in which economic clustering leads to economic integration (rather than segregation) is through the high rate of entrepreneurship amongst immigrants.

One of the reasons proposed as to why immigrants may have an advantage in entrepreneurship, especially in trades such as the garment and shoe industries, which are typified by low-start-up cost and may benefit from 'the help from information networks built up by migrants.'⁶² Another advantage, is the availability of a large family network who is willing to work long hours for low, or deferred pay. The extreme example of this is the immigrant sweatshop:

'... the children of the poorest and most ignorant immigrants, whose work is imperatively needed to make both ends meet at home... To banish them from the [sweat]shop serves no useful purpose. They are back the next day, if not sooner'.⁶³

The question of entrepreneurship is also discussed by Boal (1978) who suggests that the ethnic cluster in itself creates 'protected niches' for entrepreneurs: 'In such niches, some members of the ethnic groups have been able to advance themselves through ethnic enterprise in the form of shops, or the provision of professional or personal services.'⁶⁴ Others confirm the idea that immigrants tend to fill niche needs in the economy, for instance Robinson (1984), in a study of the Asians in Britain discusses the idea mooted by Peach (1979), that Commonwealth immigrants acted in the past as a regional and industrial 'replacement population... [for job sectors] offering poor job opportunities, low pay, working conditions that the indigenous population regarded as unacceptable, and a lengthy working week'⁶⁵.

More recently, Golby (1994), in his review of migration theories, identifies a disproportionate number of entrepreneurs amongst immigrants. According to Golby, this theory proposes that entrepreneurs are typically marginal, or non-conforming members of society. This may be due to other opportunities in the economy being closed to them, either through formal barriers, or through lack of education or class. This might explain the fact that entrepreneurs often come from the first or second generation of immigrants.⁶⁶ This theory is yet to be confirmed, according to Golby, however he offers possible corroboration in that the marginal position in which immigrants are located in itself prepares them psychologically for innovative roles. Golby also maintains that entrepreneurship may be part of an economic process whereby marginal groups take up gaps in the economy others are unwilling to take.

Invariably a network of inter-supporting businesses in a single economic enclave is built up by an immigrant community and thus certain trades become associated with certain ethnic groups, such as the Chinese laundries of New York or the Asian corner shops in England.

Maintenance of cultural identity is possibly one way of sustaining the self-help network, which rubs off into self-help in finding jobs and accommodation. This is reinforced spatially by proximity between work, home, society, place of prayer, clubs and etc. It is possible that the ultimate success of certain immigrant groups may be due to the convergence of all of these factors at the same time. In addition, some sources, such as Eyles (1990), suggest that immigrant self-help creates informal local economies. This can be expressed in the payment in cash or, in some cases, with goods 'in kind'.

Other sources propose that the difference in economic development between third world and developed countries means that immigrants to the latter countries have limited job options due to the lack of training and of vocational or professional qualifications⁶⁷. The obverse is also true - the possession of urban skills (experience and occupations) benefits the rapid economic integration of immigrants, even if they are extremely poor upon arrival. For example in a study of the Irish in 19th century London by Lees (1969), she contests claims made by other studies that the Irish immigration fitted 'the stereotype of a freely floating

migration to Great Britain, in Englander (1994) p.112.

⁶² Golby, (1994), p. 61.

⁶³ Riis (1892) in Cordasco (1968), p. 182,

⁶⁴ Boal (1978), p. 63.

⁶⁵ Quoted in Robinson (1984), p. 244.

⁶⁶ See Golby (1994), p. 59-61.

⁶⁷ Robinson, (1984) p. 246.

class...[or the contrary:] an immobile lower class locked in the ghetto'⁶⁸, and suggests that there was a definite link between the possession of a skilled occupation and higher social status and achievement:

'The few migrants who had moved into medium-level white-collar occupations were almost exclusively household heads; lodgers were virtually excluded from non-manual work...household heads...were less likely to be semiskilled labourers or hawkers than men who had not established their own households.'
[Lees (1969), pp. 371-2].

These findings are also confirmed by the study by Rozenblit (1983) of Jewish immigration in Vienna, which suggests that they benefited from relatively fast economic integration due to their possession of suitable skills.⁶⁹

A different approach to economic integration is exemplified by Falah (1996) in his study of five major cities in Israel with 'mixed' populations of Arabs and Jews. In this study, based on census returns and a field survey, the results indicate that despite the apparent spatial integration of the two populations, who share the same city space, there are incidents of sectoral segregation and 'hyper-segregation', creating local areas of high spatial segregation between the two populations. In other words, rather than segregation of a minority from a majority population, we see segregation between two equal groups. Falah suggests that this situation disallows the possibility of economic and social interaction and proposes that the perception of successful integration should be replaced by the reality of a lack of neighbourly relations, except if taking into account economic relations, which do exist to a certain degree.

The factor of the economy as being the most likely potential for integration is raised by many theorists. Many maintain that the market-place is the point of contact between otherwise disassociated groups such as immigrants and their host community.

This concept of the market as a place of abstract transactions between extremes, or strangers, is also submitted by Wirth (1928), who writes of the Jewish trade relationships, that this type of relationship takes place in a situation where no other contact can take place, since trade is an abstract relationship where emotions drop into the background. Wirth maintains that the more impersonal the trader's attitude, the more efficient and successful are the transactions likely to be.⁷⁰

Bourdieu (1977) seems to concur with this, writing: 'In fact, whether a small tribal market or a big regional market, the *suq* represents a transactional mode intermediate between two extremes, neither of which is ever fully actualised: on the one hand there are the exchanges... based on the trust and good faith that are possible when the purchaser is well informed about the products exchanged and the seller's strategies...; and on the other hand there are the rational strategies of the self-regulating market, which are made possible by the standardisation of its products'⁷¹

This idea is developed further through a discussion of the difference between market buildings and shops. In the book 'Buildings and Power' by Thomas Markus (1993), the author discusses the concepts of order and meaning by tracing the history of building types, and submits the notion that the market is the threshold between worlds. According to Markus, from the turn of the 18th century, markets were regularised by constructing permanent structures to hold them which were organised according to categories of produce for sale; it was thus possible to create order out of the chaos that the street market comprised, which could be 'applied to the "amelioration of the condition of society at large"'⁷². Markus proposes that the 'relations of exchange' were critically different in markets as opposed to shops: shops allowed uncontrolled access of the public to the shopkeeper whilst markets were controlled and ordered. The proximity between shops, workshops and shopkeeper's houses allowed for greater independence of action for the shopkeeper and therefore shopkeepers tended to be urban (rather than rural in the case of market traders) and permanent property owners (rather than transient), skilled and of a higher social class (rather than unskilled).

• Negative perceptions of the 'ghetto'

⁶⁸ Lees, (1969), p. 364.

⁶⁹Rozenblit (1983), p. 45.

⁷⁰Wirth (1928), p. 25.

⁷¹Bourdieu (1977), p.172.

⁷²Fox (1814) in Markus (1993), p. 306.

The explanations given above to the clustering of immigrants or minorities have pointed out possible positive aspects of this phenomenon. It is also important to note the theories that propose that clustering is caused by negative factors.

Russell and Lewis (1900) maintain that exclusion caused by prejudice contributes to the creation of ethnic clusters, such as the cases where landlords prefer to not rent to outsiders. The counterpart to this situation is that many minorities choose or are forced to lodge with their longer-established brethren; indeed Russell and Lewis devote an extended section on the Jewish Landlord. Such a situation of clustering related to prejudice supposedly reinforces the spatial boundaries of the ethnic area and has been proposed in a study of the Irish in London.⁷³ This theory is explained by Englander:

'Housing and rent struggles were in fact a major source of tension between host and minority populations... The influence of inter-communal conflict upon spatial patterning in the Jewish East London was pronounced. The assertion of Jewish territoriality was contested street by street by an indigenous population that was alarmed by the inflationary influx on rented accommodation... In those districts on the edge of the foreign quarter, where street supremacy had not been settled, resistance to Jewish encroachment was most intense... [and] led to the formation of Jewish exclusion zones.'

[Englander (1994), p. 64].

The perception of ethnic enclaves as a negative phenomenon is typified by the biological concept of the city proposed by Park et al in 1925⁷⁴. In their book 'The City', they propose that as cities develop they tend to become segmented into areas according to economic, social and racial groupings. According to this theory, the segregation phenomenon in cities is the outcome of a process of invasiveness of foreign species:

'just as the beach or pine forest is preceded by successional dominance of other plant species. And just as in plant communities successions are the products of invasion, so also in the human community the formations, segregations, and association that appear constitute the outcome of a series of invasions'

[Park et al (1925) in Martindale and Neuwirth (1958), p. 25]

It has also been proposed by social anthropologists, such as Sibley (1992) that 'outsiders' 'disturb the homogeneity of a locality and a common reaction of the hostile community will be to expel the polluting group, to purify space.'⁷⁵ This may explain the urban nature of the Jews and other visible minorities: whereas in the village or small town, the minority remains visible both by his non-conformist practices and by his lack of participation in majority practices; in the city the minority can recede into a background of multiple roles and practices of the more varied population contained in such settlements.

The relationship between outsiders and fear of pollution is also studied by the sociologist Richard Sennett, e.g. Sennett (1971), p.120 and Sennett (1994): 'Fear of Touching', chapter 7 (about the Jews of Venice). Sennett's work is reviewed in the following section.

Having discussed the various theories regarding migration and settlement in general, the next section reviews theories regarding the specific aspects of Jewish migration, with an account of the origins of the term 'ghetto'.

⁷³ See Chance (1987) and The Commission on Race and Housing (1966).

⁷⁴ According to Martindale and Neuwirth (1958), the practice of borrowing concepts from the plant world to describe urban settlements was started by Park in 1918 to explain his theories regarding cities - cities were considered by Park 'habitats', by analogy to plant habitats.

⁷⁵ Sibley (1992), p. 120.

3.3 Jewish Clustering and the Historical Origins of the 'Ghetto'

The term 'ghetto' is nowadays used to describe clusters of minority settlement, and is usually associated with segregation⁷⁶. But it seems that the term comes from the name of the walled community of the Jews of Venice, whose isolation in an enclosed territory was first proposed in 1515⁷⁷. The location of Venice at a junction of trade routes had turned it into an international city, containing many minorities, including Germans, Greeks and Jews. In order to control the minorities, the Venetian authorities applied restrictive rules on their movement. This was taken to the extreme in the case of the Jews, who were placed under curfew within a walled, moated area. The original meaning of 'ghetto' is unclear, but most sources believe it meant 'foundry', from *gettarre*, 'to pour'⁷⁸.

• History of the Jewish Ghetto

The ghetto system is mainly a European phenomenon, dating from the 15th-16th centuries. The ghetto system persisted for the Jews of western Europe until the late 18th century, when the influence of the French Revolution took hold. By then, the exclusion in ghettos had led to severe deprivation and lack of progress.⁷⁹ Egalitarian ideas of freedom of thought and the separation of church and state, encouraged the Emancipation movement to gain strength. The physical release from the ghetto walls was coupled with cultural freedom and the influence of the Jewish philosopher Moses Mendelsohn brought about the Jewish Enlightenment Movement. This movement used the means of liberal religious schools, teaching in German (rather than Yiddish) to introduce new ideas to the Jewish community. Despite emancipation in Western Europe, forms of spatial exclusion continued for the large number of Jews who lived in Russia and Eastern Europe and although their plight was not much worse than Russians in general, they suffered from a series of persecutions and exclusions, both in the form of the 'Pale of Settlement', an area on the western edge of the Russian Empire, established in 1791 which served to prevent the Jews of White Russia from spreading throughout the country in which there were strict rules of movement, but also in general restrictions on Jewish economic mobility; forbidding them to settle outside the towns or urban areas or to engage in business on Sundays and Christian holidays. A series of pogroms in Russia, which began in the Ukraine in April 1881 and spread throughout southern Russia led to the herding of Jews 'into vast Ghettos... [and culminated] with the exodus of almost a million Jews from Russia'.⁸⁰ (although many thousands remained, under a different form of restriction, under Bolshevik rule).

The ghetto system did not return to Europe until 1940, when the ghetto was re-instituted to segregate Jewish populations under German conquest 'to result in massacres on a scale and of a ferocity which former history could not parallel'⁸¹. Moreover, their purpose was not to define the position of the Jews in Christian society, rather - 'these twentieth-century ghettos constituted merely a temporary stage on the planned road to total liquidation'⁸².

• Cultural Impact of the Jewish Ghetto

Scholars differ on the question whether the European ghetto enclosures constituted a positive step for Jewish life. Despite the fact that many sources, such as Katz (1978), maintain that the Venice ghetto and its counterparts was an enforced enclosure others, such as Sennett (1994)⁸³ suggest that the ghetto constituted a

⁷⁶ See also the definition of 'ghetto' in the Concise Oxford Dictionary, Fowler and Fowler (1975): 'Jews' quarter in city' and Webster's Pocket Dictionary, Webster and Teall (1965): 'Jewish quarter in a city'. If we also look at Roget's Thesaurus: Dutch (1977), p. 518, we find the only synonym given for 'ghetto' in the index is 'seclusion'. Underneath 'seclusion' (pp. 883-884), we find that 'ghetto' is considered synonymous with: 'exclusion; reserve, reservation, native quarter'.

⁷⁷ Ravid (1992) points out that: 'while the word *ghetto* had never been applied to a Jewish quarter prior to 1516, compulsory, segregated and enclosed Jewish quarters had existed prior to 1516 in a few places' - some as early as the Frankfurt Jewish quarter, established in 1462 (op. cit. p. 381).

⁷⁸ Sennett (1994), p. 231.

⁷⁹ See Roth (1935), p. 311.

⁸⁰ Op cit., p. 392.

⁸¹ Op cit., p. 435.

⁸² Ravid (1992), p. 383.

⁸³ See Sennett (1994), p. 215.

compromise between the economic contribution of the minority and the wish to exclude a perceived contaminating presence. For this reason, certain categories of Jews (such as merchants and prostitutes) were permitted to venture out of the ghetto, within certain times.

Other sources maintain that the segregation of Jews has never been simply a case of exclusion, but more a combination of causes, among which is the voluntary clustering of Jews in a certain area. It seems that the establishment of such clusters was exploited by the powers in charge, to further their own wishes; be they protection of the Jews from without, segregation of the Jews from the rest of the population (in order to limit cross-marriage), or simply for the ease of taxation. Thus ghettoisation was not wholly negative - for instance Wirth writes:

'The segregation of the Jews into separate local areas in the mediaeval cities did not originate with any formal edict of church or state. The ghetto was not, as sometimes mistakenly is believed, the arbitrary creation of the authorities... but rather the unwitting crystallisation of needs and practices rooted in the customs and heritage, religious and secular, of the Jews themselves. Long before it was made compulsory the Jews lived in separate parts of cities in the Western lands, of their own accord.' [Wirth (1928), p. 18]⁸⁴.

Historians, such as Hertzberg (1968) submit that the Jewish ghetto enabled social cohesion for the community due to its enforced concentration. This meant that a specifically Jewish identity could be maintained through reinforcement of religious practise. The walling in (or in later cases, the concentration) of the community also afforded protection from oppression and attack from the outside. Ultimately, ghettoisation in continental Europe led to self-government by the Jewish populations. Self-government took a slightly less independent form upon the re-settlement of Jews in England in the mid-seventeenth century, where the London Jewish community established its own organisation, the *Mahamad*, which was an elected committee of peers for the Sephardic community of Bevis Marks. The *Mahamad* was a civil authority for the community, but had influence on decisions made by the religious authorities⁸⁵.

The segregationist view of the ghetto is also subject to recent criticism such as that by Ruderman (1997), who in a lecture on the cultural significance of the ghetto, laid out the evidence that high rates of cultural interchange took place between the ghetto inhabitants and Venetian society during the period that the ghetto has been viewed as being hermetically sealed. For instance, Jewish marriage certificates, sacred music and synagogue architecture reflected the Baroque creations of their time. From the point of view of cultural contributions in the reverse direction, Ruderman claims that Jewish learning was disseminated amongst Christian scholars, who took advantage of the development of printing, to learn more about the great works - creating a 'dynamic universe'. Ruderman suggests the ghetto might have positive aspects, since it allowed the maintenance and intensification of Jewish culture in a period of change, whilst taking in those parts of the host culture that could enrich Jewish society.

This section has presented the background to theories on migration and settlement and has referred to many studies into the spatial impact of migration. The following section reviews the methods used in studies of this type.

4. From Urban Space to an Objective Description of Society

The need for an objective method of description to understand the form of residential patterns is generally agreed in the field of urban geography and is said to date from the theories of Park et al (1925), who are viewed as the inspiration for the rigorous use of scientific quantitative materials in spatial analysis in the field of human geography (despite the fact that this aspect of their work lessened as the years went by): 'Reduce all social relations to relations of space and it would be possible to apply to human relations the fundamental logic of the natural sciences'⁸⁶.

For example, in an essay entitled: 'Social Interaction: the problem for the individual and the group', one of Park's followers, Wirth (1939), maintains that studying social interaction is the key to understanding social

⁸⁴A note on spelling in this thesis: when quoting texts published in the United States, such as this, they have been changed to English spelling in order to prevent confusion.

⁸⁵Hymason (1951), p. 29.

⁸⁶Cited in Ley (1980), p. 4.

order and suggests that 'In attempting to comprehend the wide variations of personal behaviour within the matrix of a culture, we must pay heed not merely to the relationship of the individual to the group but to the highly variegated associations in which he participates.'⁸⁷ Surprisingly, there is no spatial element to this analysis, despite the fact that Wirth had deep interest in urban social space. Park and the Chicago school's descriptive method of analysing and understanding spatial form is the precursor to the field of human geography which developed in the middle of the 20th century.

Although there has been a consensus regarding the need for objective data since the 1920s, translation of the awareness into actuality is relatively recent, as only since the late 1960s have data been available to conduct these studies. It is the growth in availability of small-scale social data that has brought about the strengthening of the field of urban geography and the growth of interest in small area studies - looking at the formation of ethnic enclaves, economic ghettos and other subjects at this scale. One recent example by Chance (1987), uses a method of identifying 'invisible' populations and its boundary (in this case the 'excluded Irish'): he initially identifies population through Irish surnames and records of local schools, then selects smaller group and asks them to map their routes to the shops, work, leisure activities, premarital addresses - known as an activity analysis. Other studies of this kind are: Jones (1970) and Duncan (1977).

If we look at work by people such as Johnston and Herbert (1978), we see that in recent times social data have become placed at the core of the analysis process. However, as Johnston notes, this trend has existed in parallel and in subordination to other 'anti-science' approaches, which include the paradigm of 'regionalism' which practically ignores the city as a subject for investigation. It is important to note the background to Johnston's statements: he adheres to the Marxist approach of economic conflict as the cause of the division of the city into small neighbourhoods of people of a similar disposition. In the light of this, he suggests that the use of small-scale statistics should be applied to the study of conflict between small groups so that the motivations of single families can be studied, although in some cases studies may include 'the character of the area in which the dwelling is situated, with the people who live there and the social milieu which they create'⁸⁸.

A different group of urban geographers is formed around the pre-eminence of the spatial aspects of urban analysis. This group is personified by such scholars such as Harold Carter, whose analysis is principally data-based. As suggested by Carter and Lewis (1990), the data required for analysis of urban clusters are divided into those that can facilitate the reconstruction of spatial patterns and those that deal with the processes that effected the shape of those patterns.⁸⁹ Carter clearly believes that there are limitations in his field in its ability to analyse urban landscapes. His solution is to view the city as the artefact through which society can be studied:

'the evidence for attitude and ideology lies in the artefact. In the urban context, the artefact is the social and physical fabric of the town which reflects attitudes and ideologies' [Carter (1983), p. XIV].

The principal sources suggested in Carter and Lewis (1990) for spatial analysis are census data, rate books, business directories and descriptive and statistical accounts. Lastly, maps are seen as useful for both mapping the social data and for studying land use and tenure. As noted by Carter and Lewis themselves, these data sources are limited by their looking at the city at specific points in time (due to the census appearing decennially) in addition to the problems inherent to census data⁹⁰. Despite the importance of the work done by urban historians such as Harold Carter, there lies a limitation in their research in that the social pattern is studied in the context of the spatial, but the spatial pattern itself is not studied as a separate entity. However, numerous studies in this field have looked in great detail at the spatial aspects of the segregation of socially homogenous groups (namely, ghettos), which have resulted in descriptions of the nature of such settlements, although these tend to concentrate on the process of migration, rather than on its spatial impact. See for example Lawton and Pooley (1976), Shaw (1979) and Lewis (1982).

The following section describes studies in which the spatial form itself is analysed in order to understand the social aspect of urban settlement.

⁸⁷ Wirth (1939), p. 17.

⁸⁸ Johnston (1978), pp. 8-9.

⁸⁹ See Carter and Lewis (1990), p. 7.

⁹⁰ These problems are described in the following section on methodology, and are best reviewed by census scholars such as Armstrong (1972) and Mills and Mills (1989).

• Spatial Description for the Retrieval of Social Patterns

The studies described above exemplify the fact that for the urban geographer, the most interesting small-scale neighbourhood unit is the immigrant ghetto, which is seen as the extreme counterpart of the trend towards homogeneity. Johnston (1978) notes that there are many different degrees of 'ghettoisation' and it is not clear how their differences may be measured:

'although it is possible to distinguish, in terms of formative processes, between colonies, enclaves and ghettos, study of patterns alone cannot establish how and why a particular spatial arrangement of population groups came about' [Johnston and Herbert (1978), p. 11].

This quote points to the possible weakness of mapping the ghetto as a purely social phenomenon - its causes are not necessarily obvious.

Schumacher (1978) highlights a lack of reliable methods of data gathering for the study of urban environments. He suggests that the current state of ignorance is so absolute, as to make experimentation based on scientific principles of setting up hypotheses quite impossible. In the same volume, Levitas (1978) maintains that 'while village plans and streets look very similar from one site to another, the kind and number of activities that take place on the street may be very different even for similar looking settlements, and the difference depends largely on particular social structures'⁹¹. In other words, it is difficult to understand social structure from spatial form - a notion made apparent by social theorists above.

We see a different attitude from that found in the field of historical geography, when we consider the urban planner's view, exemplified by Martin (1975), who suggests that the city grid acts as a framework for activities, acting as the controlling factor of how we build in the city, and 'the way we build may either limit or open up new possibilities in the way in which we choose to live'⁹². In other words, he sees the possibility that space itself may have an impact on social life. In the same volume, Lionel March (1975) suggests the use of mathematical models for the analysis of built form - there is an expression of his belief that there is a lack of scientific method in architectural design and the need for the creation of empirical evidence to support research. This trend is expanded upon in a third essay in the volume by Bullock and Dickens (1975), which discusses the use of urban models in planning. Here we find a call for 'descriptive models' rather than 'prescriptive models', since the former allows the planner to both predict future trends and to understand the outcome of future planning policies. The model, however, stays in the theoretical mode for the urban level and only goes into detail when discussing activity networks at the level of university planning.

Following onto these ideas we see attempts to approach the need for descriptive analysis in articles such as that by the planner Krüger (1979), who proposes, after March (1975), to break down urban configurations into a pattern of connections. He sees the building as the basic urban unit and urban built form as a set of 'built-form arrays' collected into 'built-form constellations', which are in aggregate, the 'built-form galaxy'. This use of terminology is interesting, since it makes an analogy between buildings in the city and planets and stars in space - buildings are the measurable entity, according to Krüger.

The notion that space itself is a measurable entity is also taken up by Hillier and Hanson. The theories of Hillier and Hanson were first proposed in a series of articles in the early Seventies and published in 'The Social Logic of Space' in 1984. The social logic of space, according to Hillier and Hanson (1984) is that social activities are essentially spatial and that the urban environment has an impact on human activity by enabling social practises to be carried out. Although space is not seen as being deterministic in the creation of social encounters or behaviour, according to Hillier and Hanson space creates the potential for such activities.

The consequence of the social logic of space, according to Hillier, is that the form of society can be 'read' by describing the form of the space in which social encounters take place. This form of description retrieval promotes the active role of space in the reproduction of society. By describing space mathematically, the

⁹¹ Levitas (1978), p. 230.

⁹² Martin (1975a), p. 10. This essay is part of a collection (entitled 'Urban Space and Structures') on the research done at the Centre of Land Use and Built Form Studies in Cambridge. The Centre's work is based on empirical studies which attempt to arrive at a theoretical framework for urban design, building design and urban planning. According to Hanson (1989), p. 35, their work is 'closest in spirit to "space syntax" research'.

relationship between space and space use can be analysed and understood.

Through their theories, Hillier and Hanson arrive at a way in which the analysis of the urban grid can be interpreted: Since the structure of the urban grid creates a field of potential encounter (the 'encounter field'), the analysis results can explain the potential pattern of movement distribution. In cases in which we can count the actual movement distribution, we may conclude that the difference between the projected results and the reality is the result of cultural variation. Space syntax methods are described in greater detail in chapter 3.

5. Summary and Conclusions

This chapter has reviewed theories on the relationship between space and social solidarity and theories on migration and settlement. Certain conflicts emerge between some of the theories presented and lead to the analysis in the following chapters. The following summarises the key points of the theories and highlights where it is believed that gaps in the knowledge may be resolved by this study.

The review of writing on space and community suggested that in many theories on this subject there is a paradigm underlying the concept of community - that there is a congruence between communities and the territory in which they are located. Moreover, this paradigm presumes that communities are normally spatialised. Other theories reviewed have contended that some communities are transpatial and that in the case of urban settlements, it is more likely that community membership comprises multiple, overlapping group ties. The theories regarding multiple membership of social groups seem to be in contradiction to theories which maintain that social groups identify with a spatial boundary which they 'recognise'. Such theories of territoriality seem to stem from a notion that society is made up of discrete communities, with specific territories. This notion seems to assume that a group sharing one common aspect will tend to find other common interests and ties. Although other proponents of the theory of territoriality also suggest the possibility that some social groups are not allied to a specific boundary, the underlying principle seems to be that individuals are acting as part of a cohesive group with common ties. These theories lie in contrast to Hillier and Hanson's theories on transpatial societies, which propose that some social groups only come together in space on occasion - as in the example of the Guilds in the City of London, which meet in certain locations at certain times of the year, but during the rest of the year have non-spatialised links.

- The case of the Jewish community seems to fit neither of the models of spatial/transpatial societies, since on the one hand we see evidence that Jews are highly spatialised, with strong links to a specific territory due to the communal activities around the synagogue. On the other hand, evidence has been presented that the Jews have transpatial links, which make social group links across borders - due to temporal, linguistic and religious aspects. These apparent contradictions highlight the need to investigate the distinctiveness of the spatial nature of Jewish settlement.

Evidence was presented that there was a conceptual difficulty both amongst the population at large and within the academic field, with reference to 'ghettos' being linked to 'segregation'; Theories regarding the outsider in society seem to start from a vantage point that spatial concentration equals spatial segregation. However, other theories were presented which raised the possibility that there may be more than one type of segregation - the most common examples given were the 'ethnic enclave' as opposed to the 'economic ghetto'. However, even in these cases the implication seems to be that high density settlement of an identifiable minority equals separation, yet the nature of that separation is not explained. In the case of 'economic ghettos' the implications seem to be more clear cut, with a tendency for theories to contend that they are due to exclusion of the disadvantaged from opportunities for improvement, although recent studies on the Irish poor quoted here, would tend to quash that notion.

- The possibility that ethnic concentrations may have more than one aspect of segregation is one of the key ideas which lie behind the analysis in the forthcoming chapters; which will look at whether concentration equal segregation and will see if there is a relationship between high density settlement and poverty.

This chapter also presented theories which seem to see a heightened social cohesiveness in 'outsider' communities - especially in the case of minority groups - which propose that proximity and high density living promote the internal integration of families and groups from the same background. Yet other theories

suggest that high density living of minority groups creates economic and social separation of those groups from the rest of society. The two theories are not necessarily mutually exclusive, and it seems possible that a better understanding of the nature of the 'outsider' in society may be achieved by looking at minority groups from more than one angle.

- This question will be approached in this study by making comparisons of economic, occupational and social structure for the Jewish high density settlement and other settlers in the urban areas considered 'ghettos', as well as comparing these two groups to the rest of the city.

In addition, theories were reviewed that suggested that convergence of all the properties that bring about clustering may make some immigrant groups more prone to clustering than others. Research into Jewish clustering specifically has presented this minority group as typical of such cases and has suggested in addition that in this case social solidarity is more strongly spatialised, since the Jews are dependant on the synagogue, whose congregation would be tied to the maximum walking distance on the Sabbath. Thus it is suggested that the boundary of the Jewish community may be more strongly defined than in other cases where travel is permitted and that the phenomenon is more prevalent and takes place over longer time in this community, even beyond the first stage of settlement and despite attainment of economic mobility and a lessening in religious observance.

- These contentions will be examined in the spatial analysis of Jewish settlement, to see if high density clustering takes place both for new immigrants and for immigrants who have been in the country for a longer period of time. Analysis of whether Jews are more likely to possess immigrant settlement indicators (such as marrying or sharing a household with someone from the same country) which other groups do not, will also address theories which contend that Jewish settlement is different from that of other immigrant or minority groups. In addition, analysis of the process of Jewish settlement formation in Leeds from 1841 to 1891, will assist in understanding the temporal factor of this issue; in what manner does time in the country contribute to spatial location and at what stage does the spatial form of the settlement take shape.

The review of research into urban patterns of settlement presented evidence that small-scale analysis of urban settlement has only developed since the availability of suitable data in the 20th century. A relatively small number of studies have dealt with the reconstruction of spatial patterns; whilst most studies of this nature tend to prefer random sampling of data in order to study subjects such as ethnic enclaves and economic ghettos. This review also highlighted sources which contend that the nature of many of such studies is to look at the social patterns in the context of the spatial, without separating and objectifying the spatial aspects in their own right. Those studies that analyse the socio-spatial aspects of enclaves, ghettos and so on, tend to use sources of data that are aggregated by local area - even in historical studies, where greater detail is available. This section also reviewed sources which relate to the theory that the spatial aspect of settlement should be measured objectively in its own right and also reviewed the development of theories in which mathematical models are used to represent spatial configurations, finally leading to the Hillier and Hanson theories and methods of 'space syntax'.

- The research conducted in this thesis uses Hillier and Hanson theories in addition to methods used in migration studies, to bring together the proven methods of both fields to analyse patterns of Jewish settlement according to the points highlighted above. The following chapter describes the methods employed in this thesis in greater detail.

CHAPTER 3

From Theory to Practice: methods of analysing immigrant settlements

1. Introduction

The purpose of this chapter is to review the types of methods used to analyse immigrant settlement: firstly in order to present the background to the methods employed in this study and second to highlight the difficulties apparent in methods used by others and also those chosen here. The first section discusses the methods used for analysis of clusters of ethnic minorities, mainly used in the field of human geography and also reviews methods of studying secondary settlement by immigrants. Next, the sources of data for this thesis are reviewed and lastly, the analytical methods used in this thesis are presented and outlined. A full record of data analysis can be found in the appendix on methodology, which shows how each of the data sets was created¹

2. Methods of Studying Ethnic Clustering

The difficulty in measuring spatial attributes, especially the concept of segregation in the case of ethnic enclaves, is repeatedly noted, as in Lees' study of the Irish in London. Lees suggests that it is difficult to establish when a clustering becomes a concentration; as for instance, the Irish in London have been shown never to cluster to such a degree that they constitute a concentration that can be called a 'ghetto'² yet their clustering has been repeatedly remarked upon. This idea is also considered by Boal (1978), who suggests that the difference between 'enclaves' and 'ghettos' is that the former are due to voluntary segregation of the minority population, whilst the latter is due to enforced segregation³. It is sometimes proposed, as in the example of the study by Waterman (1989), of 20th century Jewry, that the degree of perceived segregation is more to do with the distinctiveness of the minority population as to its true levels of segregation.

Various ways of measuring segregation are used in geographer's studies of migration; although frequently the analysis of segregation uses measures aggregated for the ward or enumeration district. There are many fewer cases of settlement research at the street or household level, which can be problematic since aggregation of data has the potential for a lack in objectivity and consistency and for loss of detail. Other problems with some of the research done in this field is that in many cases random samples are used, rather than analysis of entire population cohorts being undertaken, as is explained in the following section.

2.1 Methods of Studying Initial Settlement by Immigrants

¹About 35 data-sets were created for the Manchester analysis and 32 for Leeds, not including the electronic files of 'raw' census data.

² Lees, (1969) pp. 359-85.

³ See Boal (1978), p. 80

Examples of research using aggregating methods are found in the work of Simmons (1981), who looks at the creation of Asian residential segregation, measured as the relative percentage of the minority within the indigenous population. Another example is Pooley (1977), who conducted a comparative study of Welsh, Irish and Scottish migrant settlement in Liverpool, 1872. Pooley employs enumeration districts as the unit for comparison of data from the 1871 census and compares place of birth of household heads (using as a control, households of non-migrants or people born elsewhere in England).⁴

However, other studies do use smaller units of comparison. In this type of analysis, the difference in the nature of the residence of the minority is compared with the majority population. For example, in a study by Hounslow Borough Planning Department, quoted in Simmons (1981), comparisons were made for the following characteristics of housing: use of amenities; access to bath or shower, age of property, whether shared dwelling or not, bedroom standard (proportion of number of bedrooms to number of residents). Other aspects looked at include the socio-economic groupings, determined by occupation of head of household.⁵

There are various methods used to analyse ethnic segregation. Segregation is normally measured by plotting the percentage distributions of variables by the sub-area of the city. This is taken for each variable in turn, for instance the percentage in different social classes, in overcrowded households or from the same place of birth. It is suggested by Roy Lewis that broad social contrasts are revealed by this method and spatial correlations can be made between maps of each of the variables⁶. But again the drawback of analysing by sub-district is the introduction of subjectivity, in the choice of study boundary or indeed, that the boundary has no relevance to the settlement in question, but is an arbitrary construct (such as taxation or parish boundaries).

Other contemporary studies of segregation use the 'index of dissimilarity', which measures census areas according to how different a minority group is from its surroundings on a scale from 0 (no segregation) to 100 (complete segregation). This measure seems to be at odds with a more global understanding of the degree in which the minority is integrated into its surroundings since the areas of study are determined by the same scale as the measures employed and because there is no comparison with the wider area. This problem has been noted by experts in the field, such as Massey and Denton (1987), who fear that this standard measure masks other important dimensions.

Massey and Denton attempt to deal with this problem by using multiple variables of scale in their study, measuring 'evenness' - the differential distribution of two social groups; 'exposure' - the degree of potential contact between minority and majority group members within urban areas; 'concentration' - the relative amount of physical space occupied by a minority group in the urban environment; 'centralisation' - the degree to which a group is spatially located near the centre of an urban area; and 'clustering' - the extent to which overall units inhabited by minority members adjoin one another in space.⁷

Another method commonly used in the measurement of segregation is random sampling. Most recently, in chapters 5 and 6 of 'Living the Global City: globalisation as local process', in Eade (1997b), we find a statement about the limitations of this method. In this study of a random sample of 221 residents of Wandsworth in London, it is pointed out that the method may distort the 'relationship between locality, living, connectedness, belonging, family and community'⁸. Moreover, in an area in which there are minorities, random sampling may miss out some residential clusters of minorities, as suggested by Fennell (1997).

2.2. Methods of Studying Secondary Settlement by Immigrants

⁴ For example, Jones and Davenport (1972) on Dundee; Dalton and Seaman (1973) on Ealing, London; Duncan (1977) on Huddersfield.

⁵ For a full list of studies based on census data, see Mills and Pearce (1989), which is a bibliography of similar studies.

⁶ Quoted in Drake and Finnegan (1994), pp. 199-200.

⁷ See Eyles, (1990), p. 52.

⁸ Eade (1997b), p. 15.

'The migration [after the initial stage of settlement] occurred in a distinctive pattern, with settlements occurring in clusters' [Lipman (1990), p. 15].

Both Simmons (1981) and Robinson (1981) point to another aspect of migration studies - the study of the change of the settlement form over time. They note the importance of looking at the edge of the 'ghetto' area and that the second generation of immigrants is likely to be that making the move.

The method used to analyse the spatial pattern in this model [described in Boal (1978)] is to create a utility matrix for each individual in the study, showing: on the y axis, the attributes of the destinations considered and in the columns of the x axis, the places for which information is available. The relative weight of each destination is calculated by adding up the variable scores. Distance is built in as a variable by considering whether the individual is making a 'partial displacement', where he can maintain existing employment, schools, etc.; or if he is making a 'total displacement', where movement cost becomes an important variable. For example, Pooley (1978) suggests a correlation between higher status economically and longer distance moves.

Another example of an examination of the internal moves of ethnic immigrant groups is given in Waterman's study of Jewish settlements in Dublin up to 1980. He explores these in the light of what, he suggests, are the common patterns for immigrant groups and explores the significance of neighbourhood and community in residential change decisions. In this article, Waterman (1983) maintains that one of the principle considerations when choosing a new residential location is proximity to other members of the same ethnic group. Another measure of ethnic integration is given here - the degree of interaction with neighbours from outside of the ethnic group. Waterman suggests that the consideration made when choosing a new residence that the neighbours are of same ethnic group, is sometimes given greater importance than the neighbourhood status.

2.3 Methods of Studying the Reproduction of Society in Space

The theories of Hillier and Hanson, reviewed in chapter 2, are concerned with description retrieval; describing the form of space in order to create an objective description of society. These concepts led Hillier and Hanson to conceive of a computer system that can capture the most basic describable elements of space in order to discover the underlying rules which create the apparent 'randomness' of urban space. By inventing a new form of analysis, 'Space Syntax', Hillier and Hanson are able to 'create phenomena' by describing the spatial configuration in an objective manner⁹ and then analyse the configuration using statistical measures of relative depth. The advantage of the method is that it deals with the city at the level of the street space, rather than aggregated areas of information and that the measures it uses deal with the relationship between each space in the system to all other spaces, so enable consideration of the local to global properties of spatial structures.

Space Syntax has been applied for describing and analysing patterns of space; creating an objective system of describing social environments by simulating the urban environment on the computer, from which comparisons with social phenomena can be made. This is done by representing the pattern of space as a set of the fewest and longest set of 'axial lines'. The principle lying behind the axial line representation is that movement is mainly related to the one and two dimensional extensions of space. Indeed, Hillier (1996) maintains that the linear structure of the town is fundamental in controlling the organisation of space since the distribution of local and global integration becomes...

'... the most powerful functional mechanism driving first the pattern of movement and, through this, the distribution of land uses, building densities and larger-scale spatial and physical elements such as open spaces and landmarks' [Hillier (1996), p. 215].

Axial line break-up allows for the local space unit (usually called a 'convex' space, i.e., one from which all other points are visible) to be fully represented, by ensuring that all the axial lines drawn pass through all the convex spaces in the system. More importantly, the global extension of space is ensured representation, by drawing the longest lines of sight and access possible.

⁹ After Hacking (1983), who in a section called 'The Creation of Phenomena' explains the process of scientific experimentation.

The axial lines are analysed by computer, whereby the lines which are most accessible for all other lines are considered 'integrated' and those that are least accessible are considered 'segregated'. Research using Hillier and Hanson's system 'Space Syntax' has led to the theory that local and global integration are one of the fundamental properties of space. According to their theory, towns give priority to certain spaces: the main square or common High Street will tend to be shallower and thus more generally accessible (i.e. highly integrated) than more secluded, deeper, quiet areas (segregated). Major commercial and public facilities will be within easy reach of other parts of town. According to Space Syntax analysis, global integration describes the relative depth of individual spaces as they relate to the spatial system as a whole. Local integration relates to the spatial properties of space up to three steps away. An integral part of this theory is the proposal that movement patterns in cities are related to the integration values; with, in general, pedestrian movement being correlated with local values, and vehicular movement with global values.

The concept of integration is one of the fundamental properties used by Hillier and Hanson in measuring space.¹⁰ According to their theory, 'Towns give priority to certain spaces: the main square or common High Street will tend to be shallower and thus more generally accessible (i.e. highly integrated) than more secluded, deeper, quiet areas (segregated). Major commercial and public facilities will be within easy reach of other parts of town.' (op. cit., 1983).

Movement rates in cities have also been studied at the Unit for Architectural Studies with reference to the accepted theory of 'attractors'. This theory, usually applied by traffic engineers, contends that traffic movement in cities can be attributed to flows of movement from and to 'attractor' land uses. The contention is, that by modelling movement to and from all 'attractors', it is possible to predict flows of traffic. In contrast with this, 'Space Syntax' studies have submitted that the location of 'attractors' is related to the pattern of 'natural movement' in the city. As explained earlier, the theory of 'natural movement' contends that the urban grid acts in itself as the main distributor of movement. The findings of studies relating to 'attractors'¹¹ have demonstrated that the stage at which retail land-uses start to 'kick in' to the movement pattern is at the stage at which they are located to take advantage of the opportunities offered by passing trade; these studies also submit that 'attractors' may be acting as multipliers of the basic pattern of 'natural movement' generated by the grid configuration.

The theories and methodologies of Hillier and Hanson are used in this thesis to analyse the spatial parameters of the Jewish settlements studied. However, rather than relying purely on the spatial factors of integration and so on, census data are used as a major and vital part of the analysis process, in order to add the social dimension to the analysis. The key advantage of using the space syntax methods, besides their use in pure spatial analysis, is that they provide a reasonably objective baseline for comparing other data at the smallest spatial unit, obviating the need to rely on aggregated data.

3. Background to Methods and Data Sources Used in This Thesis

The purpose of this section is to describe the data-sets and sources used in this thesis and to review their limitations and how the limitations are dealt with. This thesis uses two main sources of data for analysing the settlement of the Jews in Manchester and Leeds. These comprise: Ordnance Survey maps, at 25" and 6" to the mile and census data for the relevant years studied. These sources are introduced in greater detail at the start of each chapter in which they are employed, and their compilation is described in the appendix,

3.1 Ordnance Survey maps as a source for axial mapping

The Ordnance Survey maps, first published in the mid-nineteenth century, provide a detailed and accurate source for analysing the spatial form of Manchester and Leeds. By mapping the full built-area extents of the cities, it is possible to embed the areas of Jewish settlement in their spatial context. The maps also provide a means of identifying the spatial location of streets in which Jews were known to live in addition to the distribution of railways, rivers, canals and other key geographical features.

¹⁰ The technical aspects of these measures are explained in the following section.

¹¹ Such as Stonor, T: The Manchester Pedestrian and Vehicular and Movement Study, Unit for Architectural Studies, Jan. 1993.

Due to the long periods between editions, there is sometimes a potential problem with the accuracy of maps as a source of spatial form. However, due to the relatively slow development of the cities in comparison with current practise, these sources were seen as reasonably accurate [e.g. Dickinson (1906)], especially as larger scale maps were used to verify the location of small alleys and building complexes [e.g. Dickinson (1849)], in addition to the use of an earlier edition for analysis of the earlier years of settlement in Leeds [e.g. Ordnance Survey Map (1852)].

3.2 The Use of Census Data - General

Census data provide an across-the-board analysis of an area; in addition to which, full analysis of data (rather than selective sampling) narrows the margin of error to the minimum. This thesis used electronic formatted data on the 1881 census¹² and microfiche records of the 1841, 1851, 1861, 1871 and 1891 of the original Census Enumerators' Books provided by the Public Record Office, which were compiled and computerised for this thesis¹³.

The limitations of census data have been raised by various sources Higgs (1996), Kosmin (1975), Schürer and Arkell (1992), for instance. They point out that census data only provide a 'snap shot' of events and do not reflect, for example, population fluctuations due to the season or to the special nature of migrants, who tend to be more in a state of flux than long-time residents of an area. Obviously, census data also do not show people who were not home at the night of the census or those who chose not to co-operate with it¹⁴. Other problems raised have been with the self-definition of relationship to head of household and occupational status; neither is the enumerators classification always reliable, since a degree of interpretation is needed for special cases and limitations of English may also prevail.¹⁵ Yet, by using data on the entire population of each of the settlements, it is hoped that these limitation are not critical, since both the size and the comprehensiveness make the gaps in the information less significant. Moreover, consideration must be given, when interpreting results, to the fact that some people, especially immigrants, are not included in the analysis. The following sub-sections introduce key issues in the use of census data.

• Definition of Households

The principal aggregation of census data in this thesis was according to household. The difficulty with defining households, or principal residents (as distinguished from family units headed by lodgers and boarders) has been pointed out by Lawton (1978). The problem is due to the lack of consistency in the enumerator's classification of sub-groups of households, who are sometimes defined as lodgers, when they might have been a second family at the same address, living as co-residents.

The use of ages as a data source can also be problematic. If required to distinguish between working and non-working members of a household this can be inaccurate since children were listed in employment as early as 13 and as married as early as 15 and their occupation was frequently listed as 'scholar'¹⁶. Secondly, age can itself be inaccurate since, as pointed out by Higgs (1996) : 'There may have been pressures to falsify some ages. It has been suggested that there was a tendency to raise the age of children in their early teens in the censuses of 1881 onwards, since under the Factory Acts children were not allowed to work until they were 13 years old....'¹⁷.

¹²See Genealogical Society of Utah - Federation of Family History Societies (1997).

¹³See appendix for description of how computerisation was undertaken.

¹⁴See for example, Andrew Godley's references to Jewish statistics in the 1871 and 1881 censuses for London, for which he quotes sources that claim 'there were complaints in the 1880s and 1890s that East European Jews were not complying and the enumerators were missing thousands of alien immigrants', see: 'Leaving the East End', p. 57 in Kershner (1997).

¹⁵ See for example, Dan Segre writing in his memoirs of life in provincial Italy in the 1930's: 'Luigi was a much-travelled southern Italian who never felt perfectly comfortable with the alphabet. Unable to fill in the census form by himself, he once asked me to put his profession down as "sculptor in butter" '. Segre (1987), p. 90.

¹⁶ It should be noted that the category 'scholar' was used very widely in the census to describe the occupation of offspring of various ages. See Higgs (1996), pp. 100-1, who suggests that the number of working offspring was likely to be concealed by the notation 'scholar', which could cover the case of a child only working weekends or after school, as well as one who was in full-time labour.

¹⁷Higgs (1996), p. 81.

Many of these problems can be overcome by the aggregation of large numbers of family units; contrariwise the use of ages in studies employing random sampling as a main source of information is made more inaccurate by these limitations.

• Definition of Social Class

Social class is a key measure used in this thesis to analyse economic and social status. The difficulty of defining social class has been a subject for discussion since census records began. As pointed out by Banks in Lawton (1978):

‘the concept of social structure... entails the notion that in spite of their obvious differences, several occupations are more like one another in some, unspecified way than they are like other occupations... These likenesses and differences, moreover, are not simply attributable to intrinsic characteristics of the occupations... but to some other feature of social life which is thought to be *related* to occupation.’¹⁸

In other words, occupations are more to do with the general standing within the community, than the average income from any given occupation.

As noted by Carter and Lewis (1990), occupation is commonly used as the main measure of class or status and is useful for delineating the broad patterns. ‘Although there are limitations in such as a shorthand approach, it has the advantages of giving an indication of income (and thus the life-style which could be afforded) and of being readily available in the census enumerator’s returns’¹⁹.

The methods employed in this thesis for classifying social class include classification by occupation according to Armstrong’s categories of occupation (explained below) but are reinforced by other measures, such as family size, incidence of shared households, number of servants and number of lodgers, all of which have been employed in various of the studies quoted above. It is therefore hoped that the limitations of social class classification methods are counter-balanced by the use of several other measures.

Armstrong’s categories, first published in 1972, are based on Charles Booth’s revisions of social analysis of occupation at the end of the 19th century²⁰. Booth proposed that his revised categories would ‘establish the relationship between the occupation, family size and poverty’.²¹ Armstrong’s system attempts to unify the Booth system, which changed from census to census and was full of ambiguities.²² The Armstrong classifications used here are as follows:

Class I	<u>Professional</u> , etc., occupations; employers of 25 or more persons; house or land proprietors; 'living off interest'; 'of independent means'
Class II	<u>Intermediate</u> occupations; brokers; class III occupations which employ more than one person (in boarding, catering etc. more than one servant counts for this purpose); annuitants ²³ .
Class III	<u>Skilled</u> occupations; 'dealers' and 'merchants' except those specifically described as brokers or hawkers;
Class IV	<u>Partly skilled</u> occupations; hawkers
Class V	<u>Unskilled</u> occupations; paupers

This list accounts for adjustments made by Armstrong to the initial categories he created for the 1851 census of York, see Armstrong (1972), pp. 198-212. These adjustments were principally undertaken to make distinctions between employers and employees within the same industry. Higgs (1996) suggests in his

¹⁸ See Lawton (1978), p. 179, chapter 6: 'The Social Structure of Nineteenth Century England as Seen Through the Census'.

¹⁹ Carter and Lewis (1990), p. 125.

²⁰ Higgs (1996). Charles Booth presented his proposals to the Royal Statistical Society in 1886.

²¹ Higgs (1996), p. 158.

²² Drake and Finnegan (1994), p. 47. At the time of writing this thesis, further revision of social classes is being undertaken by the Office of Population Censuses and Surveys (OPCS), in order to reflect technological and organisational changes in the skill structure of the working population of Britain today. These changes were initially reviewed in a report: OPCS (1995), and are currently being undertaken as a full-scale project by OPCS.

²³ According to Culling (1996), an annuitant is a person living off an annuity.

book on the use of census data that Armstrong's system is slightly problematic, since it bases some of the class attributions on the number of servants per household²⁴. The problem lies, according to Higgs, in the fact that a person listed as 'servant' in a household, could be employed elsewhere and simply lodging with that household. Another problem raised by Higgs is that the economic status of the household is obscured since it only considers the occupation of the head of household and unless the head is a woman, female employment is omitted from the analysis. However, these problems primarily lie with the earlier censuses of the 19th century and Higgs points out that Armstrong's system is more reliable when 'individuals are given more meaningful occupational titles to begin with... and some of these problems might be overcome if one could link census data to other sources'²⁵. Since information on occupation was confirmed and elucidated in this thesis by the extra detail available from the business directories (where available), it could be said that the need for confirmation from other sources is dealt with, in addition to which, other methods of economic classification are used here in order to overcome these problems.

Armstrong himself deals with other criticisms which are directed at the relatively large number of people whose occupation falls into his Class III. He states the need to break down this class, since 'it remains composed of disparate groups in that... non employer shopkeepers and workers will be found... rubbing shoulders with traditional craftsmen, employees in the new industries of the industrial revolution, and workers in transport, building and services' and suggests that by breaking this class (and any other class that seems over-large) into subdivisions by industry, accurate analysis can be obtained²⁶. This breakdown is undertaken in this thesis in chapters 6 and 8 which study occupations in greater detail.

3.3 The Use of Census Data - Identification of Jewish Households

In addition to the census data used to create a contextual background to the periods of Jewish settlement studied here, this thesis uses two main sources of data to identify Jewish households in the census. These are the computerised data tables of Jewish households of Leeds [e.g. Freedman (1994)]²⁷ and the hand-written lists of Jewish Residents of Manchester by Williams (1992), which were extracted by Bill Williams for research on his book on the history of the Jews of Manchester [see Williams (1985a)] and were computerised for this thesis²⁸.

Waterman and Kosmin (1987) point out the difficulties of identifying Jews in the census, since it does not contain a question regarding the respondent's religion. Self identification, a method sometimes used in small scale social studies, is not useful when mapping an historical group and communal records (such as synagogue membership lists) only pick up those who are religiously allied to the community (this is not considering the fact that some factions of Judaism do not recognise the definition of 'who is a Jew' made by others). Section 4.2 below details how these difficulties are dealt with.

²⁴ Higgs (1996), p. 135.

²⁵ Higgs (1996), p. 185 and 188.

²⁶ Armstrong (1972), pp. 213-214.

²⁷ Mr. Freedman is a member of the Leeds Jewish Historical Society.

²⁸ See Williams (1985), pp. 355-356 for full description of the data gathering process. For a description of how these data were computerised, see appendix on methodology. Mr. Williams was the first chairman of the Manchester Jewish Museum Trust and is now its honorary president and historical adviser. He is a historian lecturing at Manchester Metropolitan University.

4. The Application of Methods and Data Sources in This Thesis

4.1 Space Syntax Analysis ²⁹

Space Syntax analysis examines the spatial configuration of cities by defining all external spaces as a continuous network of space. The spatial configuration is represented by the set of the fewest and longest lines of visibility and permeability that link between all spaces in the network. Past research using this method has consistently found the importance of the axial map in representing a picture of the patterns of movement and activity that are common in cities.

The Unit for Architectural Studies (now operating as the Space Syntax Laboratory) at the Bartlett School of Architecture has developed methods for the analysis of spatial layout in buildings and urban areas, modelling the relationship between spatial layout and how people use and move through buildings and using these models to effectively predict relative levels of movement within a system. This method is based on the theories advanced by Hillier and Hanson (as described in the literature review), in which a primary property of the form of the urban grid is to privilege certain spaces over others for through movement. In this way it is suggested that the configuration of the urban grid itself is the main generator of patterns of movement. The spatial unit related to in this theory is the 'axial line', i.e. the longest line of sight and access that defines each of the street spaces in the system (or in the case of buildings, in the building). The layout of the urban or building system is represented as a system of axial lines, each of which is studied according to how accessible it is from all other spaces in the system.

The axial line break-up is analysed by computer as a pattern of accessibility, measuring the relative distance of each part from the system as a whole, and then describing the system according to the distribution of accessibility; ranging from the most accessible, 'integrated', to the least accessible, 'segregated'. The numeric properties of the spatial system are laid out in a table, allowing the mathematical analysis of the relationship between the spatial properties and other numerically measurable properties of space use. The numeric properties are also represented graphically, by colouring up the axial lines in a spectrum of colours from cold to warm, assigning the blues to the least integrated lines, the greens to the next and so on, through yellows and oranges to the most integrated lines, coloured red (or in a black and white map from light grey to dark grey and black).

The key measure of the axial map is the integration value. Global integration (or integration radius n) measures the degree to which each line in the map is present on the simplest (fewest changes of direction) routes to and from all other lines. A version of global integration, termed 'local integration' (or integration radius 3) restricts the measurement of routes from any line to only those lines that are up to three steps away from it. This measures the localised importance of a space for access within a particular part of a city area.

The Unit for Architectural Studies at University College London (now the Space Syntax Laboratory) has applied these analysis techniques to a number of urban sites, ranging from housing estates to central city spaces³⁰. In all of these sites they have found a statistically significant ($p \leq .05$) correlation between movement rates and integration values, observing that movement consistently rises as streets become more integrated and that the relative range of movement does not change according to the time of day, i.e., those streets which are the busiest during the morning, are continuously so throughout the day. In other words, these studies have proposed that a large proportion of movement in cities can be explained by the basic configuration pattern itself. In general, pedestrian movement tends to correlate with local movement and vehicular, with global. The only exceptions to this relationship are modern housing estates which do not correlate at all, or in some extreme cases, (as the Alexandra Road estate at Swiss Cottage) the relationship has been found to be bifurcated.³¹

²⁹ Section 4.1 is based on a report co-written by the author entitled: *Crime and Security in Hospitals* published by The Unit for Architectural Studies, for NHS Estates, February 1994.

³⁰ The results reported here are summarised in "Natural Movement", B Hillier, A Penn, J Hanson, et al, in *Environment and Planning B: Planning and Design*, 1992, volume 19.

³¹ Hillier B., 1988, "Against Enclosure", in *Rehumanizing Housing* (Butterworth, Kent) pp. 63-85.

4.2 Methodology for Data Collection: General Census Data

• **Compilation methods for general census data: household data**

The general census data used in this thesis can be divided into two groups:

a) In the case of the 1881 census, census records were provided by the ESRC Data Archive at the University of Essex, Colchester, Essex, which processed the index created by the Genealogical Society of Utah, who created an electronic record of the 1881 census for the entire population of Great Britain³². These took the form of very large computer files. For instance, the computer files for Manchester and its environs took up 165 MB. It was therefore necessary to compile the data into a more manageable form: First, the computer files provided by the Data Archive were processed by deleting all streets that did not contain Jewish households according to the Williams and Freedman lists of Jewish households in Manchester and Leeds (described below). Then, since many street names were repeated in several parts of each city, a double-check was made by searching for specific Jewish households in the street data to make sure the correct street had been identified on the map and in the census.

b) In the case of the 1841, 1851, 1861, 1871, 1891 censuses, general census data were available in the form of microfiche films at the London Record Office. After ascertaining the location of the relevant films, these were searched for the streets in which Jews were known to have lived. Then the pages on these streets were copied for entry into the electronic database, as follows: All entries for streets in which Jews resided were copied from the original records at the London Record Office. The photocopied records were then entered into a statistical table, in which the individual records were compiled into totals per household.

Figure 1 overleaf demonstrates the procedure used to aggregate the census data from a raw state of individual records to summaries per household and summaries per street. Both household and street summaries were used in the analysis. Figure 1 shows the following:

- In the top box is a representation of the census data in the form in which they appear in the census enumerators' books, where each row of information was for a single person. The arrows show which of the data were compiled into summaries per household.
- The central box is a representation of the compilation of census data where each row of data was for a single household. In some instances, as well as the summaries, further compilation took place: such as definition of Jewish/non-Jewish households, categorisation of place of birth for head, wife and boarder/lodger and a further category of whether these were the same; categorisation of social rank according to occupation and so on. The arrows show which of the data were compiled into summaries per street.
- *The bottom box is a representation of the compilation of census data where each row of data was for a single street. In some instances further compilation took place, such as the calculation of ethnic density (the percentage of Jewish to non-Jewish households in a street).*

³²See: Genealogical Society of Utah (1997).

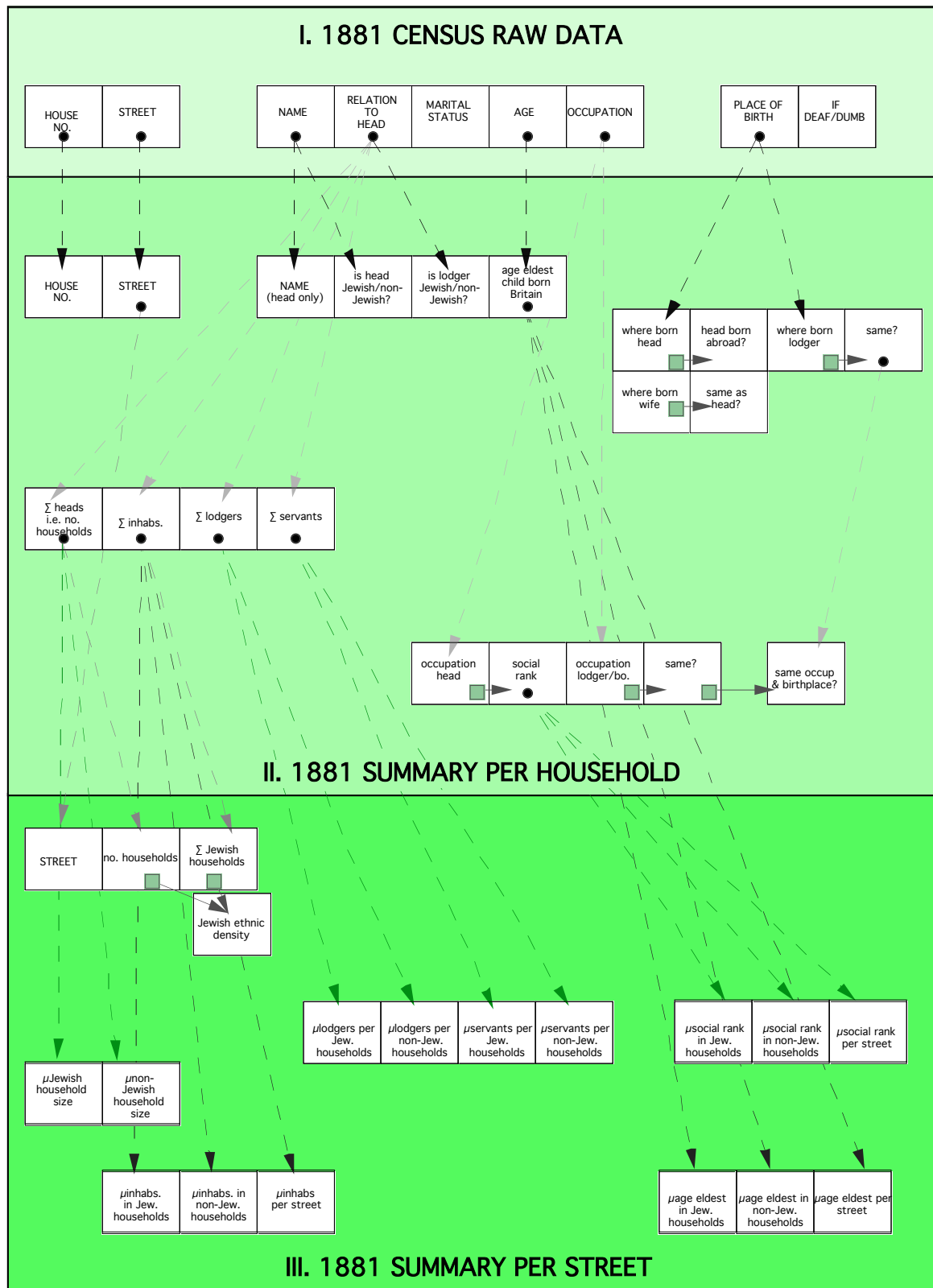


Figure 1: Compilation of Census Data.

Following is a description of the compilation method of raw data on individuals to household summaries. For a detailed description of the methods, see appendix a:

- 1) Uninhabited houses were omitted. Visitors were not entered into the statistical table, nor counted as members of the household.

2) If more than one head of household were shown at the same address, the address showed the relevant number of households. The 1891 census improved on the clarity of the definition of household, by instructing enumerators to use the term 'occupier' to the 'resident owner, or to a person who pays rent, whether for the whole of a house, or for a tenement consisting of one or more rooms.' This meant that lodgers who resided in independent households, even within the same building unit, were generally given their own household schedule. Therefore, as suggested by Higgs (1992), p. 189³³, we may expect to see in the 1891 census smaller numbers of lodgers listed in 'relationship to head of household' since many would have been considered households in their own right. In general, the method employed in this thesis was that suggested by Armstrong (1972), as follows: household units were considered as the entire list under 'head of household' and cases where lodger's wives (or children) were listed as 'wife' rather than 'lodger' (or 'child' rather than lodger), these were still counted as lodgers for the purpose of this study. Head equivalents were also considered as heads (e.g. 'widow', 'husband away', spinster). Where two or more successive individuals were listed as 'head', they were considered co-residing and the households were considered shared.³⁴

3) Each head of household was copied as an entry and the remaining members of the household were summarised; number of heads, wives, offspring, relatives, servants, Jewish boarders or lodgers, non-Jewish boarders or lodgers and the total number of inhabitants. In households with more than one head, the elder was copied or if one was Jewish and one not, the name of the former was copied. If no head was specified, the eldest was copied

4) The occupation of the head of household and of any lodgers and boarders were entered in two consecutive columns (in order to see if lodgers/boarders were from the same occupational group as the head of household). A category column was added after these to define if both columns matched. In cases where the head was a lodging or boarding house keeper, the occupation of lodgers and boarders was considered inapplicable and therefore the column defining if they matched the head's occupation was left blank. The occupation of the head was classified by social class and by industrial group classifications (see following sections).

5) The place of birth of the head of household, of his wife and of any lodgers and boarders were entered in three consecutive columns. Category columns was added after these to define if both head and wife were from the same country and if the boarder/lodger was from the same country as either head or wife. If the head of household was born in Great Britain, the categorisation of the place of birth of any lodgers and boarders was ignored. If a lodger or boarder was a child, his place of birth was ignored for this purpose.

6) 'Employer', 'employed' and 'neither employer or employed' were entered into so-named columns in the statistical table of 1891. Higgs (1992), discusses the definition of employment status in the 1891 census (which was the first to record such information) and points out its limitations; mainly that the definition of unemployment was omitted and the definition of retirement was broadened. However, the main problem seems to be with farmers and agricultural employees, whose listing was ambiguous; since this study deals with urban areas, this should not be considered a problem. In the earlier censuses, if employment status was mentioned, this was entered into a column which recorded the categories listed above.

7) The maximum length of time in Britain of all non-British in each street was calculated by noting the age of the first child to be born in Britain in each non-British household, averaged per street. In households with more than one head of household, the age of the relevant children of each head was averaged. In cases where none of the children had been born in Britain, 0 was entered. In cases where there were no children the column was left blank. This enabled a picture to be drawn of how new to Britain the population of a given street was, once street summary tables were created.

³³ Edward Higgs worked as an archivist for the Public Record Office. He is the author of key publications in census studies, including: (1996) *A Clearer Sense of the Census: the Victorian censuses and historical research*; London Record Office.

³⁴ See Lawton (1978), pp. 52-53.

• **Compilation methods for general census data: definition of social class**

Armstrong's classifications of five social classes (see above) were applied to all Jewish heads of household in addition to the cases where Jews were living as lodgers and boarders in non-Jewish households.³⁵ Obscure occupations, such as 'knocker-up' ('man paid to wake up northern mill and factory workers on early shifts') were identified in a book on occupations published by the Federation of Family History Societies³⁶.

• **Compilation methods for general census data: definition of industrial grouping**

The analysis of occupations according to industrial groupings is normally made in order to study employment trends, such as the pattern of female employment, the decline of specific industries or the expansion of others. The method employed in this thesis (for the analysis of the 1881 census of Manchester, chapter 7) was to classify the occupation of the head or sole Jewish lodger or boarder according to Armstrong's Industrial Classifications³⁷ and the Cambridge Group³⁸ Occupational Group Classification³⁹. Armstrong's system classifies occupation by *function and industry* and contains 14 categories which break down into 8 principle areas: Agriculture and Fishing; Building; Dealing; Domestic Service; Manufacturing; Other occupations, including independent means; Public and Professional; Transport. The Cambridge system categorises occupation by the *commodity concerned* and contains 27 categories which cover 6 main areas: Professional; Domestic; Commercial; Agricultural; Industrial; Unoccupied. As suggested by the Cambridge Group, the 27 categories were also summarised for this study in a column containing the 6 main groups.

The system of occupation classification was guided by the notes given for the 1891 Census Project, Spitalfields created by Diana Rau, as well as the computer file for that project⁴⁰. Thus, classification of any occupations that appeared both in the Spitalfields database and in the Manchester 1881 database were copied. Otherwise, the guidelines of the system was adhered to closely. If the occupation was blank in the original census record, but the business directory provided further information on the occupation, this was added to the table.

4.2 Methodology Used to Identify Jewish Households

As explained earlier, the general census data were used both to create a context for analysis of Jewish households and as a source for analysing the Jewish community itself. The following section describes the methods for identifying Jewish households in the census used by Bill Williams for Manchester and Murray Freedman for Leeds. It also details how William's and Freedman's data were processed for this thesis, which used their lists to identify the location of Jewish addresses in Manchester and Leeds.

Bill Williams and Murray Freedman employed similar methods for identifying Jewish inhabitants. They both looked at the census records for the entire built-up areas of the cities in question, as well as some outlying settlements. They identified households which were likely to contain Jews through name (both names that are nearly always Jewish, such as Cohen and names of Germanic or East European form), occupation, and country of birth. After this stage cross-referencing was made with other sources of communal records (such as synagogue membership lists, burial records and so on) in order to verify whether the people in question were part of the established community or had a link to it. Both researchers point out that the lists are generally minimal lists, since questionable cases were eliminated. This means that some individuals might have been overlooked. However, considering the fact that in the key data-sets used, the numbers of Jewish individuals studied ran into thousands, the omission of a few cases is not likely to

³⁵ The decisions on how to classify each occupation were assisted by the full socio-economic groupings lists created by Armstrong in 1972 for the York 1851 census. See Armstrong (1972), especially pp. 198-214.

³⁶ Culling (1996).

³⁷ See Armstrong (1972), pp. 253-283.

³⁸ The Cambridge Group for the History of Population and Social Structure is a 'Designated Research Centre for the Economic and Social Research Council'.

³⁹ Cambridge (1996).

⁴⁰ See Rau (1993) and Rau (1994).

have had an impact on accuracy. Williams also used Business Directories as a source of data on Jewish work addresses. Since the trade directories were published commercially for sale, and the people listed did not pay for their entries, some quite small businesses were listed, which led to relatively wide coverage of the business population of Manchester. This added to the accuracy of identification of Jewish addresses.

As mentioned in section 3 above, the process of identification of Jews in the census can be problematic, since invariably not every Jew had a typically Jewish sounding name; whilst there were occasions of disaffiliated Jews who still retained their 'Jewish' names. The methods used by both Williams and Freedman propose to deal with these difficulties by double checking 'Jewish' names to see if they appear in community registers, such as synagogue lists (thus eliminating disenfranchised Jews) and by taking community registers as a source for Jews with atypical names. The only drawback notable in this method is that individuals who were not affiliated to the community and did not have 'Jewish' names might have been eliminated from the lists. However, this method picks up most Jews who considered themselves to be Jewish (by joining communal organisations) and so is of less concern in this study - which deals principally with the Jewish community as a social group. In addition, the proportion of unaffiliated Jews was relatively small in the period considered here (as compared with 20th century Jewry). The following section describes the method of identification of Jewish names in greater detail.

• Identification of Jewish Households in the Census

The methods employed by Bill Williams and his team for identifying Jewish individuals in Manchester were as follows⁴¹:

- 1) Initially the Census Enumerators' books for Manchester and Salford were searched for all persons who might be Jewish - this was based on name, occupation and place of residence. The method for going through the census lists or directories was first to look for Jewish sounding surnames, then surnames and first names, then first names of children. There were several degrees of certainty, depending on whether in addition to 'Jewish' names, the person in question was born in Poland, Russia, Austria etc. and/or practised a typical 'Jewish' trade (such as tailor, machinist).
- 2) Next, the communal lists (such as synagogue membership lists, subscription lists, school registers, marriage registers and so on) were studied in order to pick up people who were definitely Jewish, but did not have Jewish sounding names (and therefore would not have been picked up through the census itself).
- 3) The next stage was to trace back names discovered by these lists in the trade directories, to find their work addresses. Williams' method was to take trade directories and list all likely Jewish families. The directories include: Cheshire Directory; Piggots Directories* and Kelly's Directories*. The directories for the preceding and following three years of each census were checked, as well as the census year itself, i.e. in the case of the 1881 census, the years 1878-1883 were checked. The trade directories showed both business and home addresses. Directories normally contained a list by inhabitants, a list by trades and a list by streets.
- 4) Lastly, the communal lists allowed removal of people with Jewish sounding names who were either not Jewish or not associated with the community. This was done for all areas of Manchester except the Red Bank area, which was distinguished by the lack of affiliation of its Jewish inhabitants with organised communal institutions. An example of a marginal case would be someone with a German sounding name, who was born in Lancashire and did not practise a typically 'Jewish' trade. Such people were generally excluded, unless they appeared in Jewish records (synagogue lists, burial records and so on). Thus the Williams lists are exclusive rather than inclusive.

This process was very similar to the method used by Murray Freedman for Leeds⁴².

• Compilation of Data on Jewish Individuals into Household Data

Since information on the location of Jews in Manchester used in this thesis was based on paper lists of the

⁴¹An explanation of the methods was given by Williams in a telephone conversation on 30 January 1997, but can also be found in Williams (1985a), in the appendix on the maps.

⁴²See Freedman (1994), pp. 1-2.

Jewish inhabitants of Manchester, 1881, Williams' lists had to be transformed into an electronic format. The paper lists were first compiled and transcribed into an electronic file which summarised information on Jewish individuals⁴³ and then compiled into summaries per household and per street as detailed above. A file of work addresses was also created, that followed the same process, but only copied instances where a work address had been noted. Since work addresses were given in some cases for boarders, sons, lodgers etc., these were copied into this file, whereas they would not appear in the main address file. These tables provided a guide to the correct identification of Jewish households in the general census data, as well as enabling analysis of specific questions relating to work patterns.

Information on the location of Jews in Leeds used in this thesis was based on electronic lists of Jewish individuals provided by Murray Freedman, which were compiled into household summaries⁴⁴, according to the same methods used in Manchester. The electronic data provided by Freedman were translated from Lotus 123 file into a StatView file that retained all the original column formatting. Freedman's lists were used to identify Jewish individuals in the census and street locations on the map for the six censuses from 1841 to 1891.

5. Summary

This chapter has outlined the various methods usually applied in the field of ethnic spatial analysis and has described the methods employed in this thesis. It has presented the main sources of data and explained how their limitations will be dealt with and has also described how the data were compiled for this thesis. In chapters 5 to 8, the analytic chapters, the principle data sources will be reintroduced and greater detail will be given about their application in the analysis.

⁴³See Appendix: Data Set Compilation Methods, entries on Full Census Data, Manchester.

⁴⁴See Appendix: Data Set Compilation Methods, entries on Full Census Data, Leeds.

CHAPTER 4

Background to Settlement in Manchester and Leeds

1. Introduction

The purpose of this chapter is to review the various sources on general and Jewish history of England, historical geography, social history and economic history, that pertain to the settlements in question. This enables the analysis given in the following chapters to be put into context and for key analytical questions to be raised in the conclusions to this chapter.

Despite their relatively small size when compared with London, the urban centres of Jewish settlement outside of the capital developed rapidly in the late 19th century in parallel with the urbanisation and industrialisation of the country in general. The cases studied here, Manchester and Leeds, are considered exemplars of Jewish provincial migration due to their size and density of settlement, and it is these characteristics which led them to be the subject of this thesis¹.

This chapter starts with a review of the history of Jewish settlement in Britain and is followed by reviews of the specific historical, geographical, economic and social aspects of Jewish settlement in Manchester and Leeds. Seven colour plates are associated with this chapter; they present the data on the spatial location of Jews in each of the cities in question, but do not serve to analyse those data. Full analysis takes place in the following four chapters, whilst here the plates are used to illustrate the various aspects of settlement in Manchester and Leeds.

2. Historical Background to Jewish Settlement in Britain

Jewish provincial settlement is normally dated from the early 18th century where it was still at a very small scale (the relevant dates for when the communities were considered established were 1825 for Manchester and 1840 for Leeds), whereas Jewish settlement in London started earlier, in the mid-seventeenth century². The Jewish population of the two cities in 1881 (the key date of data sources used in the analysis) was 7,000 in Manchester³; and 2,900 in Leeds⁴. The parallel figure for Jewish settlement in London was about 40,000.⁵

Jewish resettlement in England is normally dated from 1656, the date from which Jews were able to

¹See Englander (1994), p. 247 and Lipman (1990), p. 99. In addition, the measures of size and number of major Jewish institutions mark these two cities as the most important outside of London in the 19th century. Other major centres were Glasgow, Birmingham and Liverpool.

²Williams (1985a), p. 31; Freedman (1992), p. 4, respectively. Both authors note the creation of a Jewish burial ground as being a significant factor in measuring the establishment of the community. By this measure, Jewish settlement in London can be dated from 1657, when the first Jewish cemetery was started in the city, outside City walls in Mile End; see Meller (1985), map of cemeteries.

³Figure from Lipman (1990), p. 16. VD. Lipman was an historian whose specialisation was in the history of Anglo-Jewry, especially in the 19th and 20th centuries. His scholarship frequently dealt with the question of the relations between the Jews and the 'host' community.

⁴Figure from Freedman (1992), p. 23.

⁵Figure from Lipman (1990), p. 14

practise their religion openly, although prior to that date Marranos (enforced converts from Spanish territories) arrived clandestinely⁶. The new settlers were for the most part merchants of substance, probably allowed back into England because of their ability to contribute to England's rise to commercial primacy. Those that settled in London comprised both merchants and physicians.

According to Katz (1978)⁷, the Jews of England differ from the Jews of the Continent in the fact that since the resettlement of the Jews in the mid-17th century, there have been no legal restrictions on their settlement in England. Wirth (1928) concurs with this, noting that 'the most important feature that distinguishes the [Jewish] communities of the West from those of the East is their voluntary character'⁸. Yet Wirth and many others still use the term 'ghetto' to describe Jewish settlement in Great Britain and the term is still commonly applied to the various forms of settlement by Jews in the west despite the fact that these have nothing in common, aside from them being Jewish clusters of settlement, with the original ghettos set up in Europe.

Most sources distinguish between Eastern and Western Europe when considering restrictions of Jews, since the Emancipation of Napoleonic times allowed many Jews in Western Europe legal freedom. But there were exceptions to this; even in Holland, which was noticeably tolerant of the Jewish presence, there were still occurrences of restrictions. For instance, the towns of Utrecht, Gouda and Deventer denied residence to the Jews well into the 19th century. (This is the principal difference distinguishing the status of the Jews of England and those living on the continent - the lack of restriction of abode.)

Another distinction between British and Continental settlement in the 19th century is in the size; in many British cities, the number of Jews was too small to create a distinctive area of settlement, although signs of settlement in earlier times have been preserved by the naming of quarters in some towns and cities as 'Jewry', despite the fact that Jews have not been present there for many hundreds of years (such as the *Old Jewry* in the City of London and *Market Jew Street* in Penzance⁹). On the other hand, in Europe, urban Jewish settlement tended to be larger and more clearly defined.

2.1 Pattern of Immigration and Settlement

According to Bill Williams, the trickle of migration that emerged in the early eighteenth century, may have been encouraged to leave London in order to not be an economic burden on the Jewish community there¹⁰. The first recorded settlement after 1656 outside London is at Portsmouth. In the North of England, Liverpool was the initial focus of settlement, it being an established port. Jewish settlement in Manchester started only in the 1780s and finally reached Leeds in the 1840s - where the total number of Jews, according to Freedman (1992) was only 56. Many of the provincial Jews initially did not settle in one specific place, rather were itinerant hawkers, travellers and pedlars. Even when settled, many continued in these occupations, as evident as late as the 1851 census.¹¹

By the 1850s, Jewish settlement in England had stabilised, with little or no immigration. The majority of Jews became middle-class, British born, taking to shop-keeping, commerce, manufacture and in small numbers, the professions. According to Englander (1994), the Jews employed an industrial strategy whereby they chose the type of trades that allowed for home-working. Towards the latter part of the 19th century, Jewish industries developed, especially the clothing and footwear trades, and were given the pejorative term 'sweating'. According to the sociologist Charles Booth, the sweated industries were typified

⁶ Jews were present in small numbers England before this date, but until 1656 had no legal status in the country, since their expulsion by Edward I in 1290.

⁷ Katz (1978), p. 3.

⁸ Wirth (1928), p. 129. Wirth [1897-1952] was a sociologist who was interested in empirical research into city life. His book 'The Ghetto' studied American immigrant settlement in the light of the European Jewish experience. He worked as sociology researcher and latterly as an urban planning reformer to alleviate bad housing conditions and to look after minority rights.

⁹ The Jewish settlement around *Old Jewry* dates from mediaeval times, and has no geographical connection with the settlement in London after 1656. The settlement in Penzance is so disconnected from contemporary Jewish settlement that the care-taking of the cemetery and its records has been taken up voluntarily by a local Christian, due to the few numbers of Jews in Cornwall.

¹⁰ Williams (1985a), p.1.

¹¹ For example, Murray Freedman's extract of Jewish names from the 1851 census of Leeds shows that out of 79 cases, 29% listed their occupation as Hawker and 3% as Traveller.

by 'long hours, insanitary conditions and irregular earnings'¹². By choosing trades in which capital and skill were minimum - both qualities that were generally lacking amongst the immigrants - the Jews could find jobs more easily and when necessary, for all members of the family capable of working. Some sources attest to the fact that the narrow band of trades in which Jews were found was also due to conscious exclusion, for example, J. Stallard in 1867: 'The occupations of the Jews are undoubtedly influenced, to some extent, by the prejudices which still prevent them from working on comfortable terms with the English and Irish labourers'.¹³ This source goes on to explain another cause of the narrow band of occupations amongst the Jews; this is their religious requirements for rest on the Sabbath and the numerous festivals throughout the year, which lead them to self-employment or employment by fellow-Jews only:

'It is almost impossible for a Jew to be bound apprentice to a master who is not of the same persuasion; being interdicted from partaking of his food, from working part of every Friday and the whole of every Saturday... besides the festivals... This loss of time no Christian master can afford... No Jews can be employed in Christian factories, shipyards, engine-works, or shops... and so are necessarily driven to occupations in which they work at home or in connection exclusively with members of his own community' [op. cit. p. 111].

On the other hand, other sources attest to the fact that in some cases, Jews employed Irish workers, who were the other main immigrant group willing to work in the sweated industries (this was also an opportunity for Irish women to be employed).¹⁴ Chapter 6 of this thesis describes a full analysis of occupational structure for the Jews of Manchester where their pattern of employment is studied in greater detail.

The next period of Jewish settlement in England is that between 1858 and 1881, when the number of Jews in Britain grew from 36,000 to 60,000¹⁵. According to Lipman (1990), the growth in numbers beyond natural increase (which was higher than that of the general population) seems to be due to immigration. The main place of origin for most immigrants to Britain in this period became increasingly from eastern Europe, of which Jews were a considerable number. The direction of migration was westwards, with Britain serving either as a destination or as a point of transit to America. Many of those who arrived in Britain in passage to America, chose to stay. In many cases this was due to financial limitations. The immigrants settled in the main in Manchester, Leeds and Liverpool, due to these being close to their first points of arrival. The Jewish community in London had a much smaller rate of growth, although London continued to be a great source of attraction for immigrants seeking work.

The rate of growth of the Jewish settlement in Manchester, brought it to be amongst the three most populated provincial communities - the number of Jews living in the city grew from over 1000 people in 1851 to 3000 in 1871; in comparison with Leeds, which had over a 1000 Jews by 1871. The rate of growth of the cities of Leeds and Manchester (as in the other main provincial communities) was due to their development as industrial and commercial centres, yet was also due to an influx of more migration from Eastern Europe. The development of the railways enabled mass migration for the first time; this general population move came partially as a result of famine and disease in Lithuania and Poland but for the Jews, a more urgent move of population came after the defeat of the Polish uprising of 1863, for which the Jewish participants suffered punishment. Another cause of specifically Jewish population moves was an outbreak of cholera and typhus that spread through the Russian Pale of Settlement (where many Jews were forced to settle) to the whole of Western Russia and Eastern Prussia.

The incoming migrants settled in high densities in the Red Bank area of Manchester and the Leylands¹⁶ area of Leeds (amongst several provincial cities) as well as the East End of London, which had by then been established as a Jewish district. The high density of impoverished co-religionists led to the creation of numerous Jewish charities and organisations to both relieve the poor, but also with the ultimate aim of integrating the new immigrants socially and economically into the existing population. For example, the

¹² See Charles Booth's evidence to the House of Lords Select Committee on Sweating, PP. 1888, xx, p. 307, quoted in Jones, 1971, p. 23. Booth's series of maps of poverty in London, which coloured up the streets of the city according to categories of wealth, were first published in late 19th centuries. These maps depicted the distribution of poverty in the East End of London in graphic form (and then mapped the entire city in later editions). See Booth (1902) and so forth.

¹³ J.H. Stallard, *London Pauperism amongst Jews and Christians* (1867), pp. 8-9 in Englander (1994), pp. 110-111.

¹⁴ Lees (1979), p. 95.

¹⁵ Lipman (1990).

¹⁶ 'Leylands' relates to the district being located on low-lying land.

Jewish Board of Guardians created a system of free apprenticeships and small loans whose purpose was to help the poor 'to relieve themselves - that was, to put them in a fair way of obtaining a livelihood by their own exertions'¹⁷. Despite this, problems of high density settlement in the late 1870s caused crises of insanitary conditions and overcrowding.¹⁸ In Manchester, the high number of German Jews amongst the established community made this settlement be unusually concerned with rapid absorption of the immigrant Jews¹⁹.

By 1880 the Jews had moved into a narrow group of trades; in London 25% were in the tailoring trade and in Manchester's Red Bank area (which contained a third of the Jewish population of the city in 1881), the principal trades were tailoring, cap-making, shoe and slipper -making, and glazing. Similarly, the Leylands area of Leeds (which contained 82% of the Jewish population in 1881), was dominated by the tailoring trades²⁰. The distribution of occupations in 1880 for the Jewish population of England as a whole was as follows: (percentages given as proportion from total Jewish population): Finance (merchant banking and brokers) - 10.0%; Professionals - 0.3-0.4%; Manufacturing - 2%; Merchants - 21%; Retailers - c. 40%²¹.

Along with the intensification of the existing core of settlement in the major settlements, the economic development of the existing Jewish community in the 19th century led it to slowly disperse towards the suburbs. Lipman (1990) points out that the pattern of dispersal was similar in all cities: the Jews initially formed a core of settlement, usually near the centre. The next stage was movement along an axis to settle in the more prosperous parts of the city - this was normally part of the general trend of movement to the suburbs due to the developments of the railway, trams and eventually motor-cars, which allowed the more affluent sections of society to escape the confines of the city and ultimately brought about the development of suburbia.²² According to Lipman, the suburbanisation occurred in a distinctive pattern, with settlements occurring in clusters.

2.2 Economic Development of the Jewish Communities of Britain

The pattern of Jewish settlement can be considered in the light of theories on the industrial city. According to the historical geographer Harold Carter (1983), due to the development of the multiple store, a class of shop owners developed towards the middle of the 19th century which ceased to live 'above the shop' thus leading to the demand for middle class housing. But the main influences were on the upper and lower classes: the first factor was that the introduction of large-scale industry tended to bring about a change of residential class in that area; whilst on the one hand a small number of managers and factory owners relocated to such areas, on the other hand, the indigenous wealthy population chose to move away from the insalubrious factory environments. The other factor noted by Carter is the clustering of working populations close to factories - he notes that in the 19th century the majority of the working class population continued to live close to work, in order to minimise the expense of travel. This was predominantly the case of the provinces - only London moved definitively away from factory-based labour in this period.

Some sources contend that the middle and working classes were not sharply separated from an economic point of view in this period²³ - 'the smaller shopkeepers and craftsmen who sold their own products were on the margin of the two classes'.²⁴ This can be linked to the relatively small proportion of middle-class Jews choosing to move out to the suburbs; Lipman notes a similar situation in the early part of the 19th

¹⁷ Quoted in Williams (1985b), p. 77, from the Manchester City News, 21 June 1879, quoting the Board's chairman, Henry Samson.

¹⁸ Pollins (1982), p. 122. Pollins is an economic historian with a specialist interest in Jewish economic history in the 19th century.

¹⁹ It should be noted that Lipman (1962-67) makes a distinction between different types of cultural absorption: assimilation, a merging of an ethnic minority with the wider community, through intermarriage; and acculturation, an adoption of an ethnic minority of the social habits of the general population. The former process having taken place from the start of Jewish settlement in Britain, whilst the latter is a trend only obvious in the post Second World War years.

²⁰ See Freedman (1992), p. 23 and 28.

²¹ See Lipman (1990), p. 15.

²² According to David Cesarani, in a talk given at The Centre for the Study of Migration [in Kershen (1997)], the move of the Jews in early 20th century London quite specifically followed the development of the Underground lines.

²³ See Lipman (1990) p. 18-20.

²⁴ Lipman (1990), p. 19.

century, stating that the 1850 East End Jews seemed to be socially and economically representative of the Anglo-Jewish community as a whole, forming some 50% of that community, with a mixture of well-off and poor living side by side.

According to Lipman²⁵, the trade occupations of the Jews changed in the period 1858-1881. Whilst in 1853 the majority of this group were hawkers, peddlers or street sellers, by 1880 they had developed (in parallel to the general population) to an industrial proletariat. Lipman maintains that in comparison with the general population, the Jews had a considerably larger proportional representation in the middle class²⁶. These measures of class are according to income - it is evident that despite a small number of Jews being counted among the British establishment, none could be said to be among the landed aristocracy and only a few financiers, merchants, manufacturers and professionals could be considered landed gentry. On the other hand, Pollins (1982) has difficulties defining Jewish poverty, stating that the numbers of Jews receiving at least occasional relief from charities was at least 30% of the London Jewish population, but also stating that the labouring poor - who must 'work for subsistence' were an even greater proportion. In summary, Pollins' supposed contradictory statements seem due to his including the industrial working population in his estimates of Jewish poverty. Lipman's definition is apparently more by occupation, than income. Other contradictions are pointed out by the economist Buckman (1983), who suggests that many studies of the Jewish working class in the 19th century see the Jews as constantly striving to better themselves. 'Lipman [believes that] "spiritually, most of the immigrants did not wish to remain in the proletariat"... [but regards them as] "economically proletarian". Thus his immigrant is a socio-economic freak - an admixture of worker proletarian and bourgeois ideologue'.²⁷ Buckman's criticism of historical analysis of Jewish economic issues is discussed below.

Despite their relative freedom, in comparison with other European Jewish communities, evidence seems to show that the Jews started to create niche trades to offset their market limitations, see Pollins (1982), 'There is... some evidence that the "immigrant trades" specialised by introducing new products, such as velvet and velveteen hats'²⁸. Other sources state that this was especially the case amongst tailors:

[the Jewish tailor] 'has introduced new methods and a new type of workmanship; and it would be largely though not entirely true to say that he does not actually compete with the native industry. His work is confined to certain branches, which he may be said to monopolise. Jew and gentile... "work in water-tight compartments"' [Russell and Lewis (1900), p. 67].

According to Pollins, the move into trades and away from the earlier occupations of hawker and costermonger were part of a communal effort to apprentice children into trades. This was the result of efforts started earlier to provide economic independence for the Jewish community and was brought about by schemes such as the loan or a gift of stock or equipment such as a glazier's diamond or a sewing machine by charitable organisations.²⁹ The choice of occupations promoted by apprenticeships and loans was small. According to Pollins (1982) this was probably due to the fact that Jewish firms capable of training tended to be in a small band of occupations. In addition, the capital equipment of trades such as tailoring, shoe-making and cabinet-making was 'cheap and portable' - making it possible for the impoverished immigrant to have small start-up costs and to work from home without supervision, if necessary. Lipman (1990) also explains that the above three trades were preferable to the Jews, since they could be operated at a small scale and did not require specialised premises. These occupations also did not require large work-forces and could be adapted to the time-table of the Jewish calendar. Contemporary sources such as Booth (1902), confirm that the size of Jewish workshops (in London) tended to be small, stating that only 15 out of 900 (17%) coat-makers employed 25 or more workers, whilst 80% employed under 10 workers.³⁰

It is also evident from contemporary sources that in many cases, those trades perceived as typically 'Jewish' trades, only became so after migration. For example:

²⁵ Lipman, 1990, p. 52-54.

²⁶ According to Pollins (1982), pp. 94-95, in the period 1800 to 1880, the majority of middle class Jewish merchants and manufacturers were located in London and Manchester.

²⁷ Buckman (1983), 'Problems of Interpretation', p. 5.

²⁸ See Pollins (1982), p. 46.

²⁹ See Williams (1995), p. 285, for example.

³⁰ Booth (1902) p. 59.

'Most of the Jewish immigrants who are engaged in the clothing trade in Leeds have followed different trades and occupations in their native country; but they could not get the same employment here, as English employers as a rule have a 'moral antipathy to employing Jews,' as one of them expressed himself. I know many Jewish engineers, painters, brush makers, etc., who were compelled to take to tailoring because they are Jews and foreigners. The Jew, being excluded from the means of livelihood in ordinary trades, has created industries for himself...' [from J.A. Dyche, 'The Jewish Workman', *Contemporary Review*, LXIII (1898), p. 46, in Englander (1994), pp. 112].

This is confirmed by other sources, which also indicate that Jews tended to employ other Jews:

'Not ten per cent. of them know any trade; not half of them can read or write their own or any other language... These 'greeners' will accept with equal avidity and impartiality the offer to work with a barber, tinker, tailor... or what not, as long as the offer comes from a co-religionist'.³¹

Previous analysis of Jewish occupations in London has suggested that the 'sweating' trades of tailoring and boot and shoemaking, were taken up on the whole by the new immigrants³². Russell and Lewis (1900) seem to concur with this analysis when writing:

'...the circumstances of the immigrant 'greener' are calculated to shut him out of the higher classes of industry. Even if he has been a skilled artisan at home, he has been accustomed to work on Russian methods; and apart from that, his ignorance of the language is sufficient to keep him out of English workshops. He therefore drifts into one of the typically foreign industries which require no special training...' [Russell and Lewis (1900), pp. 61-62].

Another development in labour patterns was the formation of 'sweated' workshops. According to Jones (1971) this was due to the sub-division of labour which 'indirectly enlarged the supply of labour to the casual labour market'.³³

The industrial system of sub-division is especially notable in Leeds, according to Buckman (1983), in his study of the Jewish tailoring trades in the city. Moreover, he maintains that this system means that some workers have no direct connection to their employer and suggests that this may cause them to be vulnerable to dismissal.³⁴

Ultimately, the bad working conditions led to the development of a high level of socialist awareness and especially in the tailoring trade, unionisation. The subject of unionisation amongst the Jews of England has been described in great detail by Buckman (1983), Fishman (1974), Pollins (1982), and Kershen (1995), among others - who commonly suggest that the high rate of radicalism amongst the Jewish workers of the 19th century was due to the 'politicised background from the homeland' coupled with the bad state of working conditions for Jewish immigrants in England³⁵. The economist Buckman's book 'Immigrants and the Class Struggle: the Jewish Immigrant in Leeds 1880-1914', is the most radical of these examples and concentrates on the analysis of 'statistical material, business records' but also of 'oral sources'³⁶, in order to reach conclusions on the Jewish workers - suggesting that in the key trades of tailoring and slipper-making, the undesirable working conditions led to severe discontent amongst the Jewish working class and ultimately to their unionisation. His contention is that there was severe class conflict within the Jewish community between master and worker and landlord and tenant, which has been hidden until now due to a romanticisation of the history of Jewish economics. It seems evident that his is a Marxist approach - seeing an invidious silence in the analysis of Jewish working relations that apparently hides the aggravated problem of class struggle, especially in Leeds 'owing to the relative self-containment of the Leeds ghetto economy...[t]he Jewish worker was invariably the employee of a Jewish master, whilst the ghetto landlord was also almost invariably Jewish as if by conscious social engineering, a microcosm of outer capitalist society was bred, with its endogenous system of hostile classes precariously superimposed upon a religious and ethnic base'³⁷. Certainly Buckman's use of the word 'ghetto' here seems to suggest a less than objective approach to the subject and the degree of negativity underlying his view point is not confirmed by

³¹ Numerous other sources state the same, e.g. Englander, (1994), p. 123.

³² See Vaughan (1994), historical review.

³³ Jones (1971), pp. 100-111.

³⁴ Buckman (1983), p. 92.

³⁵ See for example: Fishman (1975), p. 104.

³⁶ Buckman (1983) flyleaf introduction to the book.

³⁷ Ibid., 'Conclusions', p. 159.

other historians.

Another pattern which emerged in the economics of the 19th century city was the zoning of trades by neighbourhood. Thus, Booth (1902) found that in London, the spatial distribution of Jewish occupations in the East London was in accordance with district specialities.³⁸

The development of transport technology had an influence on centres of production which grew from small towns into cities whilst the cities themselves suffered an explosive increase in population. Carter notes that this caused the formation of distinctive 'ethnic' areas of the city, 'where immigrant populations adapted to a new culture and way of life, became therefore distinctive sections of the industrial city.'³⁹

During the 19th century, industrialisation brought about a change in the housing market. According to Carter, the two main features of this were the severe shortage of municipal housing and the large proportion of the population who rented their accommodation. The outcome of the predominance of renting was the lack of control of the worker over his living environment; bringing about a situation which was exploited by landlords, who charged high rents. Higher rent charges forced people to take in lodgers rather than be evicted. This situation brought about in its extreme, the overcrowding and slum conditions which were a typical part of 19th century cities. The radical economist Buckman's view of this is more critical. He contends that the living conditions of the 'aliens' of turn of the century Leylands in Leeds were an outcome of the exploitation of the Jewish landlord - invariably also the employer - of the immigrant Jews to such an extent that the overcrowding and high rents led to capitalist exploitation, 'landlordism' and to the development of 'slum hovels of the ghetto'⁴⁰.

This section has presented historical evidence that the Jewish immigrants to England up to 1881 settled in clusters in a small number of cities. It suggested that the immigrants began to establish themselves economically through establishment of niche trades that allowed for small-scale production and specialisation by the group. According to these sources, the pattern of employment also contributed to the physical clustering. The following two sections highlight the specific geographical and economic circumstances of the Jewish settlement in Manchester and Leeds.

3. Background to Jewish settlement and housing in Manchester

The data from the 1881 census used in this chapter capture the picture of Manchester Jewry on the cusp of the mass immigration of Jews from Eastern Europe, which is normally dated between 1881 and 1914. By 1881, Jews had been living in the city for at least 140 years. This date stems from records which show the earliest existence of the name 'Synagogue Alley' on a plan of Manchester from 1740⁴¹; however, the history of Jewish settlement in Manchester is normally dated from the end of the eighteenth century.

Jewish settlement became established in Manchester in parallel to its development as an industrial city. Although Manchester Jews had similar characteristics to other urban Jewish settlements, Jewish settlement in Manchester was distinguished by the city's position on the trans-migration route between Eastern Europe and the United States which created a distinctly Eastern European predominance to the Jewish population, since many trans-migrants chose to stay on in Manchester. According to Bill Williams, by the period covered in this chapter, over half of the Jewish population of Manchester was of Russian and Polish origin.

During the 1840s (when the Jewish population of Manchester was only 625), the first structures of Jewish communal institutions started to be erected. In addition to synagogues (of which there were four in 1881), these centred around the Board of Relief (established in 1847) which became the Manchester Board of Guardians, whose purpose according to Williams, was support of the immigrant poor; and the Manchester Jews School, whose purpose was rapid assimilation of the immigrants into the host society. Due to the contrast between the established Anglo-Jews and the newcomers, the former not only developed systems of poor relief, but also delineated the character of Jewish communal life in Manchester (as in London and

³⁸ British Library of Political and Economic Science, Booth papers, B. 197, p. 8 in Lipman (1990), p. 52.

³⁹ Carter (1983), p. 188.

⁴⁰ Buckman (1983), p. 161.

⁴¹ Cited in Williams (1985a): 'The Making of Manchester Jewry'. Much of the historical information on Jewish Manchester in this chapter is taken from Williams (1985a), who is the key historian of the Jews of Manchester.

Leeds), whereby the difference in modes of prayer between the two groups, and the desire of the established community to define its social solidarity within and exclusivity without, led to the creation of settlements in areas distinctive from the initial area of settlement and consequently, new synagogues. One of these was the Reform Synagogue at Park Place, whose modern mode of prayer was popular principally amongst the established middle-class, rather than the more traditional newcomers⁴². However, most of the established merchant class of Jewry continued to hold on to its religious ethos and sought to define its position in Jewish society through the creation of a Talmud Torah (Hebrew School) in 1879 and in later years a Shechita (ritual slaughter) Board, Beth Din (religious court) and so on. External politics were mostly the focus of less religious Jews and in the period studied in this chapter, the rise of Socialism and Zionism started to be reflected in the patronage of the Manchester Jewish elite of the new political movements.

Manchester held regional importance by the end of the 19th century, since it was the hub of railway and canal links to all parts of the country⁴³. Plate 2 illustrates the axial map for the area of Manchester, with the main buildings, waterways and railway lines indicated. The distribution of global integration for the entire map is indicated by colouring up the main streets according to their global integration values, where red indicates the highest value and blue the lowest. (Although the entire axial map was analysed, only main streets are coloured up here - the full axial analysis results are shown in the following chapter). As was explained in the previous chapter, global integration describes the relative depth of individual spaces as they relate to the spatial system as a whole. Plate 2 also shows the principal districts of Manchester, which were used to define districts of Jewish settlement (marked in red). Each of the districts is described in detail below. A couple of points should be noted with reference to plate 2:

- It is notable that except for Central Station (the southern most building, coloured brown), all main line stations are on the perimeter of the central area. Since Central Station was the closest to the southern suburbs, this became the main train link for those living there. This ultimately contributed to the development of the Chorlton area (south of central Manchester) as an important suburb for people employed in the town centre.
- The waterways of the city clearly bisect it twice, first to the south of the central district, which along with the railways, helps define its southern boundary and to the north of the central district, where again the railways help define the northern boundary. This boundary serves to cut off the principal area of Jewish settlement, Red Bank, from the rest of the city as does the minor waterway to the east of the Red Bank.

The latter part of the 19th century saw a tendency of people to move out of central Manchester. This was partly due to the development of bus networks and partly due to the tendency of employees of the warehouses and shops to seek better accommodation than their immediate social neighbours - the factory and mill workers. Many of the districts closest to the centre served the workers of the mills and factories, since they enabled the residents to walk to and from work. As these districts developed, some facilities were added, such as churches, libraries, public houses, but no public parks. Much of the housing was of poor quality, having been erected in the early years of the century when demand outstripped supply. Further out the houses tended to be of a slightly better standard and were built in terraces with back yards. (This type of housing came about after the 1844 Police Act which laid down that all new developments had to have adequate sanitary facilities. This meant that back-to-back houses could not be built. In their places terraced houses with a back yard were constructed, which contained running water and an ash-pit/privy.) For a detailed area-by-area survey, see below.

In patterns of employment, the Jews of Manchester were in many ways similar to Jews in other cities, where trades such as tailoring, slipper-making, glazing and jewellery predominated, although the

⁴²Both Reform synagogues in England - in London and Leeds - were geographically removed from the poorer, higher density settlements in the East End and Red Bank, respectively. According to Freedman (1995), the Reform movement only reached Leeds in 1940, with the establishment of the Sinai Synagogue although an abortive attempt to start a Reform congregation in Leeds in the early 1880's was made.

⁴³ Information on housing in this chapter is mainly compiled from the notes written by Chris Makepeace for the recent reproductions of Ordnance Survey maps, see Makepeace (1991) & c..

importance of cotton trade in Manchester and the city's role as a centre of retail trades had an impact on Jewish trades, according to Bill Williams⁴⁴. The foundations of trades such as tailoring were in 'the workshops of immigrant entrepreneurs' which operated along with sub-contracted piecework to create the phenomenon of the 'sweated', possibly exploited work-force.

The pattern of settlement was also similar to that of London, Leeds and other metropolitan areas. Middle-class Jewry moved out of areas of initial settlement and immigrants moved into 'down-at-heel areas recently vacated by the English working or lower-middle-class families, clearly distinguished from the residential districts'⁴⁵ of the established middle-class Jewry. Jewish political and social life in Manchester also reflected the pattern in other cities such as London and Leeds (although Williams points out that this was a reaction to local needs, rather than a direct mirror of the developments in other parts).

Plate 3 shows the full axial break-up for the limits of the Manchester built up area, with the streets in which Jews were found to reside, or which were both home and work addresses for Jews, marked in 6 colours. Each colour represents a different geographical area of Manchester (defined for the analysis). A couple of points emerge from this illustration:

- It is notable that the streets with Jewish addresses are concentrated in the north and the south of the city, whilst the centre is relatively empty.
- Although settlement is wide-spread, it is evident that some districts have larger numbers of 'Jewish' streets than others.

Plate 4 incorporates the location of Jewish work addresses (coloured navy) with the home addresses shown in plate 3. The streets indicated in plate 3 are divided into two types in plate 4: streets which only contained Jewish home addresses are coloured green, and streets which contained both work and home addresses are coloured turquoise. The total number of Jewish addresses in Manchester was as follows:

Streets with Jewish home (208) and home/work addresses (59):	267
Streets with Jewish work addresses (as identified by Williams)	59

Plate 4 indicates the following:

- Streets with only Jewish work addresses, those coloured navy blue, are concentrated almost exclusively in the central Manchester area. However there is a large number of streets which contain both home and work addresses, which tend to spread along the main routes to the south and north of the central area, with a larger pocket in the northern area - which contained the highest density of Jewish residence, according to historical records.
- Streets in which there are only home addresses tend to be in the most out-lying parts of the city in the northern districts and in the southern districts, and comprise most of all Jewish addresses there.

The area of Cheetham (35% of all Jewish streets), the area of principal settlement for the Jews in the 1880s can actually be broken up into sub-areas, each of which has a distinct character: Red Bank, Cheetham Hill and Strangeways (see plate 2). It is the area of Red Bank, which is considered historically the main Jewish district of Manchester. The district of Strangeways contained smaller numbers of lower middle-class Jews and Cheetham-Hill to the north, was semi-rural and held only very small numbers of Jews in a handful of streets.

Red Bank was on a high sandstone ridge which 'fell away from the area of middle-class settlement on

⁴⁴ Williams (1985a), p. 329.

⁴⁵ Thomas (1955), p. 20 in Williams (1985a), p. 329.

Cheetham Hill (to the north) down to the railway in the valley of the Irk'⁴⁶. (See plate 5, which highlights in yellow the district of Red Bank.) Here the houses were arranged in cramped rows along excavated shelves separated and supported by flimsy retaining walls. Two parallel roads - Verdon Street and Fernie Street (in the south-east of area) - attracted the bulk of Jewish settlement. According to Williams these streets became the heart of what, in succeeding years, acquired the character of a 'voluntary ghetto'⁴⁷. This area of 'classic slum' was, according to Williams physically invisible: 'self-contained and shielded from view by the lie of the land and a facade of shops and public buildings, socially barricaded by the railway and industries in the polluted valley of the Irk, and so neglected and ill-lit as to be in a state of "perpetual midnight"'.⁴⁸ The Red Bank district was the focus of interest and criticism in the late 19th century due to its being the area of high density settlement.

In his book 'The Making of Manchester Jewry', Williams quotes from contemporary writers to show the negative perceptions of the area:

'They were 'miserable specimens of humanity... seldom communicative or truthful....they never seem to comprehend that what was a crime in the country they left might be considered a credit here' [(Milner (1975), p. 80-1, 86 in Williams (1985a), p. 334].

Williams notes that the Red Bank Jewish community was quite removed from the remaining Jewish community's aspirations and achievements: 'Poor, squalid, gauche, inarticulate, fearful, lacking membership of respected institutions, out of step with the major intellectual and political trends in Western Europe, Jewish immigrants were as open as the Irish to ridicule and abuse'⁴⁹ (although Williams also points out that the majority of the Jews in Manchester were well respected).

Analysis of the typology of the three synagogues in Red Bank (marked on plate 2) highlights the differentiation of the population, and not a redundancy in buildings; the 'Spanish and Portuguese' synagogue served immigrants from Sephardic background; the 'Reform' represented a break away group of followers of the radical movement in Germany and the United States, although a much more 'gentle' form⁵⁰; whilst the location of the 'Great Synagogue', which served the majority Ashkenazi population, reflects the movement of many Jewish families away from the centre to the north, as it opened in parallel to the closing of the Halliwell and Ainsworth Court synagogues which were located in central Manchester. In addition to these, there were at least fourteen minor synagogues 'chevrot'⁵¹ by 1885, according to Tomlinson.⁵² This analysis suggests that the Jewish population of Manchester was fragmented in its religiosity and also, as is common in the Jewish community in general, that synagogues paralleled social groups which were tied to country or even districts of origin⁵³.

The area of Strangeways, which had decent but relatively inexpensive housing that initially attracted Jewish families in search of comfortable housing relatively close to the shops in the city centre. Strangeways subsequently became less desirable due to the encroachment of factories and warehouses from the 1850s onwards.

Like the middle-class parts of Cheetham (see above) the Chorlton district (24% of all Jewish streets) in south Manchester became settled from the 1850s onwards by Jewish merchants seeking middle-class housing. Housing in Chorlton ranged from small terraced houses, cottages and courts close to the centre of Manchester to larger semi-detached houses along the main roads south. The Jewish settlement of Chorlton mainly clustered around the South Manchester synagogue in the area of St. Peters Square (see plate 2). The area of Chorlton also contained in its southern parts, higher quality villas which were only sparsely populated by individual Jewish families. These were mainly in Victoria Park, which was notable in its exclusivity at the time. Victoria Park was a gated private area comprised of large detached houses standing

⁴⁶See Makepeace (1997).

⁴⁷ Williams (1985a), page 177. Note Williams' use of the term 'voluntary ghetto' to describe the settlement by choice of large numbers of Jews in an area. This will be referred to in the analysis.

⁴⁸ Williams (1985b), p. 81.

⁴⁹Williams (1985a), p. 334.

⁵⁰See *ibid.*, page 249.

⁵¹Chevra; pl. chevras, chevrot: Social or voluntary association for religious purposes often forming the congregation of a small, independent synagogue.

⁵² Tomlinson (1887), p. 32. These appeared on 25 July and 8 September 1885.

⁵³See for example Pollins (1980).

in their own grounds, most of which had several servants to run them, whilst a small number were smaller semi-detached residences. Many of the residents of the area were connected with the textile trade, or were professionals.

Broughton (8% of all Jewish streets) was a semi-rural area of Manchester when initially settled by Jewish merchants in the 1860s and along with Chorlton and Moss Side, had not established any significant numbers by the 1880s.

Amongst the newer settlements of south Manchester was Moss Side, which contained a significant number of Jewish families by 1881 (16% of all Jewish streets). Moss Side contained many white collared workers employed in the offices, shops and warehouses of central Manchester. The area was close to the main roads into the centre and had good tram links to it. The houses, especially those on the main roads, often included small front gardens. The back streets had less salubrious housing, with front doors opening directly onto the street, but although most of the housing in Moss Side was terraced, it still maintained its quality well into the twentieth century. The area of Greenheys (see plate 2), which held some of the Jewish population of Moss Side, was unusual in that despite its proximity to the centre, it had large detached properties which were considered very desirable. Along with Chorlton, this was the only area outside of central Manchester which was self-sufficient for shopping - from food to clothes and jewellery.

Lastly, Salford (the least populated area by Jews with 8 streets and 3% of all Jewish streets) had a similar type of housing to that of the other areas close to the city centre.

In summary, by 1881 there were three key areas of settlement: Red Bank, which contained the immigration poor; the inner suburban districts of Strangeways, and Cheetham Hill which contained the petty retailers, travelling salesmen and workshop masters who lived in reasonable middle-class housing; and the still semi-rural districts of Broughton, Moss Side and Chorlton, which contained the shopkeepers and established merchants.⁵⁴ It is notable, if we look at plate 2, that of the four purpose built synagogues still standing in 1881 (the Halliwell Street Synagogue and the Ainsworth's Court New Synagogue closed down in 1858 and 1851, respectively), three were in the Cheetham/Red Bank area and only one was in the area south of the city centre. Central Manchester (14% of all Jewish streets), which had originally contained the principal area of settlement in the 1820s, contained very few Jewish homes by 1881, yet still held a large amount of Jewish businesses - especially shops, as can be in plate 4, where the central area has mostly work addresses and very few home addresses.

4. Background to Jewish settlement and housing in Leeds

As explained in the above section, the data on Jewish settlement in Leeds capture the period immediately prior to the mass influx of migration from 1881 onwards. The first mention of a Jew living in Leeds is the burial register from 1735 for Leeds Parish Church, which includes one Israel Benjamin 'born of Jewish parentage in Germany... baptised in the 45th year of his age'⁵⁵ However, according to Freedman (1992), established Jewish settlement is normally dated from 1840. The period around 1840 was a time of transformation of Leeds from market town to industrial centre.

Although the main district of Jewish settlement was to be the Leylands (marked in grey on plate 6), initially, Jewish settlement in Leeds centred around Briggate, which was not only the main street in old Leeds but was the main street north of the River Aire and the main railway line (Briggate is to the south west of the Leylands district). The Briggate district contained a mixture of houses, shops and inns and in the initial period of settlement, the Jews lodged almost exclusively with non-Jewish landlords in the area. Briggate was the mediaeval core of the city so the streets around it were narrow and of small scale, in which housing was in yards and courts. Although not an especially prosperous district in itself, the area west of Briggate served the 'middle rank of society' and became the civic centre: the Town Hall (1858) - see plate 6, Municipal Buildings (offices, library, art gallery 1875-84), Public Baths (1866) were all located here, as well as the key higher education establishments, Grand Theatre and many shopping arcades⁵⁶.

⁵⁴ Williams (1985a), page 299.

⁵⁵ Quoted in Freedman (1992), p. 3.

⁵⁶ See Dickinson (1906).

The first Jewish immigrants tended to be of German origin and many were in the wool and cloth trades, which was then a core trade in Leeds. Germany or Prussia continued to be a source of immigration between 1841 and 1881, but the proportion of the total population of Jews born in Germany lessened from 30% in 1851 to 7% in 1881. The other main source of immigration was Russia and Poland, which increased from 24% of all Jewish immigrants in 1851 to 46% in 1881⁵⁷ and as in the case of Manchester, was probably due to the 'trickle-down' of trans-Atlantic migrants from Eastern Europe choosing to settle in England, although Freedman (1992) also suggests that Leeds was a specific magnet, especially for the unskilled, for those seeking work, since employment could easily be found in the workshops of the newly mechanised tailoring industry. Indeed, Kershen points out that many new arrivals arrived at the ports of London and Hull with a few pathetic belongings and just one vital document, 'a piece of paper upon which was written the legend LEEDS'⁵⁸; this was the result of specific recruitment of workers from Poland by a Jewish entrepreneur from the city. Moreover, according to Pollins (1982), once in Leeds or Manchester, both due to their proximity to the railway station and due to local knowledge, the Jews were directed to the main Jewish areas of the cities. He states: 'At Leeds the incoming railway passengers were assisted in their residential concentration by the efforts of local non-Jews', quoting:

' "The immigrants were led to the Leylands by Gentile guides who gathered round the railway stations... The guides grabbed their bundles and pushed both bundles and greeners on to flat handcars. Thus they were taken in state to the Leylands. When the immigrants had no address slips, the guides knew enough Yiddish to ask them where they had come from... [and to take them] to the homes of people who once had come from those places" '⁵⁹

Plate 6 illustrates the axial break-up of the map of Leeds, with the main buildings, waterways and railway lines indicated. The distribution of global integration for the entire map is indicated by colouring up the main streets according to their global integration values, where red indicates the highest value and blue the lowest (only the main streets are coloured up, the full axial analysis results are shown in the following chapter). The main points which emerge from this illustration are as follows:

- Like Manchester, Leeds is bisected by a waterway to the north and south, but the district of the Leylands (coloured white), which was the principal area of Jewish settlement in the 19th century, is further cut off by Carr and Lady Becks, (marked in blue)
- The only important building close to the Leylands district is the market-place (building marked immediately to the south of the district). The city centre, marked by the Town Hall and City Square, is to the west of the district, although not as distant as in the Manchester case.

In geographical terms, the area of Leeds remained relatively small and compact in the 19th century, as compared with Manchester, and outlying townships only became part of the city in the early 20th century. But in economic terms, by the mid-nineteenth century, Leeds had become a centre for the manufacturing industry, with engineering and textiles dominating. It is evident that Leeds' natural resources, transport connections and regional location helped make this development possible:

'A navigable river, canals... communicating with the Mersey at Liverpool... and thence with the Humber... railways branching off in every direction... These advantages give every possible facility for bringing raw materials, sending away manufactured goods, and for the access of men of business'. [from Fraser (1980): *A History of Modern Leeds*, Manchester in Kershen (1995), p. 25.].

Plate 7. which shows all the streets in Leeds occupied by Jews in 1881 coloured in red, demonstrates that the river was a distinct barrier for Jewish settlement, with this occurring in its entirety north of the river. This segmentation was due to a general north-south divide that occurred in Leeds at the time, with residential areas dominating the area to the north and industries dominating the area to the south of the river. It is evident that the main industries in Leeds utilised the river as a source of energy and transportation and of the numerous industrial works shown on the map of 1906, these include: Steam

⁵⁷See Freedman (1992), p. 26.

⁵⁸Kershen (1995), p. 36.

⁵⁹L. Saïpe (ed.), Leeds Tercentenary Celebration of the Resettlement of the Jews in the British Isles, p. 24. in Pollins (1982), p. 132.

Plough and Locomotive Works, Airedale Iron and Steel Foundry, Hunslet Linen works, Hunslet Nail Works, Crown Point Printing Works, Leeds Corporation Gas Works, The Brewery and the Docks, all along the southern banks of the river⁶⁰. On the other hand, the area north of the river and around the Leylands (the principle area of Jewish settlement in 1881), was principally residential, but also contained smaller scale industry such as leather works and shoe manufacturing works and small-scale brick works. Plate 8 highlights in yellow the principal area of Jewish settlement, known as the Leylands. The Leylands also benefited from its proximity to the shopping district to the west and south-west, around the city centre and was also close to Kirkgate Market⁶¹; whilst within the district of the Leylands itself was Regent Street, which had shops along almost its entire length. It is notable that aside from the cemetery, there was no open ground in the area and only in 1888 was the first recreation ground established in the Leylands district.

From 1851 onwards, the majority of immigrant Jews chose to settle in the Leylands area, north of Briggate and most of these were in the tailoring trade. The district of the Leylands had been settled by the Irish up until the 1860s, but by the time this became a Jewish district, the Irish had moved elsewhere, although some remained in the area.

The Leylands district is usually defined by North Street to the west, Lady Lane to the south, Regent Street to the east and Skinner Lane to the north⁶² (the eastern boundary has a clear geographical definition formed by Carr and Lady Becks, which were once the resources for power, water processing and sewage disposal for the district, according to Dickinson (1908) It is important to note that the area of Leylands was directly comparable in size with that of Red Bank in Manchester; both were approximately 0.250 square kilometres in the Leylands district.

Between 1851 and 1881, the period studied in this and the following chapters, the prominence of Leeds as a major Jewish settlement grew considerably; whilst in 1851, Manchester's community was of much greater size and importance, the large influx of Jewish immigration in the interim years, pushed Leeds to the forefront of provincial Jewish communities and it took second place only after Manchester⁶³.

Krausz (1964) states that the Leylands was a very poor district with 'mostly back-to-back houses in cobbled streets and many tumble-down yards'. Unfortunately, household density is only measurable accurately after 1891, when the census enumerator was asked to note the number of occupied rooms, but historical accounts, such as a report from 'The Lancet' in 1888 suggest that many of the houses in the Leylands had no backyards or rear windows and the housing density in the area was very high.⁶⁴ However, the worst housing was in the city centre. According to Dickinson (1908), the housing in the area ranged from the back to back housing to more orderly housing in the Regent Street and York Road areas of the 'graph paper' terrace model (see plate 8). The area south of Roundhay Road had better housing benefiting from the bye-law of 1866, which required blocks of no more than eighth terraces, with privies in between each block. This housing was still of miserable quality and only improved around a decade after the date of this study when several slum clearance programmes were implemented.

As was the case in Manchester, the more established Jews sought to prevent new immigrants from becoming an economic burden and thus created several communal institutions in the area of settlement from the 1870s onwards. The Leeds branch of the Jewish Board of Guardians was founded in 1878 in Belgrave Street, from the premises of the 'Great Synagogue' and several other charitable, religious and social organisations became established by the time of the period analysed here. These included a mikvah (ritual bath) and a Talmud Torah (religious school) - neither of whose precise location is known. The extent of communal support was much narrower than in Manchester, since Leeds did not have a well established and acculturated Jewish population till later years. The divide between the established community and the new immigrants followed a similar pattern to that in other cities, where religious observance was divided between several small chevras and two purpose built synagogues. Of the latter two synagogues, only 'The Great' was associated with the established community and was modelled architecturally on Leeds Parish Church (whilst the other purpose built synagogue was more simple in its design), according to Freedman (1995). Plate 6 shows the two main synagogues: 'The Great' and 'Beth Hamedrash Hagadol' as well as two of the several smaller chevras (others were in existence in 1881, but records of their location have not

⁶⁰See Dickinson (1906).

⁶¹This market was the location of Marks' (soon to be Marks and Spencer) first 'penny bazaar'.

⁶²See Freedman (1992), p. 26.

⁶³See Krausz (1964), p. 28.

⁶⁴Quoted in *Leeds Mercury* 16th June 1888.

survived). Other key buildings are also shown in this picture, on a background of the main streets in Leeds coloured up by global integration. Principal waterways, railways and buildings are also shown.

- It is notable from plate 6 that the high density Jewish district of Leylands (marked in light grey) is much closer to the geographical and spatial core (evident from the location of the city square and the proximity to the integration lines coloured red and orange, respectively) than was the case in Manchester, yet it is still quite cut off as is evident from the cooler colours of integration within the district.
- Like Manchester, we find that the river and railways segment the city north to south; but here the main spatial core of the city is north of the river, whereas in Manchester, the Jewish district was separated by the river from the main centre.
- Another clear distinction from Manchester is that the majority of Jewish streets in 1881 were located in a relatively small area; this is probably due to the fact that the Jewish population of Leeds was much smaller and less established at this time, and therefore had not had the opportunity to spread out to the same extent.

It is evident from historical sources that Leeds' importance for the tailoring industry was key to the pattern of employment for Jews in the city from 1851 onwards⁶⁵. As Kershen (1995) explains in her book on trade union organisation amongst the Jews, the tailoring industry in Leeds started in the 1850s, with the first use of sub-contracting and sub-division of wholesale garment manufacture in the tailoring trade. This new pattern of production created a sea-change in the industry, which prior to this date was typified by highly-skilled bespoke work; whereas with the development of sub-contracting, semi skilled and unskilled work created a new demand for labour. Although the Jews did not invent piece making, their exclusion from skilled work encouraged them to develop and extend the concept.⁶⁶ According to Kershen, the industry (whose two key centres were London and Leeds) was also typified by a division of its work-force between 'skilled or semi-skilled and unskilled; English or alien... male or female; factory or workshop hand and home-worker'.⁶⁷ The part of 'alien' in this scenario was taken by the eastern European Jewish immigrant and although part of a key industry, Jewish immigrants were sharply separated from it - for instance, Jewish females rarely worked in factories, unlike their English counterparts and Jewish aliens in general ranged from the unskilled to semi-skilled; they almost never took part in the most skilled stages of production⁶⁸. Kershen points out, however, that the predominance of Jews in the semi-skilled part of the industry masks the fact that the first workers in this new trade were rural migrant workers and Irish immigrants. However, it is correct to assert that tailoring was a key 'Jewish' industry and statistics show that many of the immigrants from the Pale of Settlement were employed in the trade prior to their arrival in England⁶⁹; although other sources maintain that the majority of Jews were drawn into the trade due to their exclusion from other trades⁷⁰. By 1881 the Jewish tailoring industry had developed somewhat and many of the small-scale piece workers had moved into the numerous small and medium sized workshops and small number of large workshops that became more common as the city's tailoring industry expanded, due to the availability of cheap sewing machines and rents.

5. Summary and Discussion

This chapter has presented historical evidence about the nature of Jewish settlement in Britain and the

⁶⁵See Krausz (1964), p. 28.

⁶⁶See Kershen (1995), p. 34.

⁶⁷ Kershen (1995), p. 4.

⁶⁸op. cit. p. 5.

⁶⁹Mendelsohn (1970): *Class Struggle in the Pale*, Cambridge.

⁷⁰ See Englander (1994) p. 112, quoted in full at the beginning of this chapter.

specific cases of provincial settlement in Manchester and Leeds. It has suggested that even before the mass migration of post 1881, there was a sharp divide between established Jewry, who sought to be absorbed into the host community and the immigrant community, who - whether through choice or through their circumstances of different culture and economic status - tended to be more cut off. In addition to social divide, differences between first and second stages of settlement were also shown in manner of worship, whilst it was also suggested that the immigrant districts were physically cut-off and were commonly perceived as being 'classic slums' in contrast with the districts of secondary settlement, which tended to contain the more economically advantaged and longer established members of the Jewish community. Despite the fact that historical research presents evidence on the economic segregation of the Jewish immigrant community, the question of whether this has a precise spatial dimension has yet to be proven - this is one of the key aims of the analysis in the following chapters: whether the perception of the immigrant districts of Manchester and Leeds as slum areas was correct. The definition of slum area is also considered from various aspects - physical segregation, relative poverty, higher rates of unemployment, lower economic status, patterns of co-dependence (such as if boarders and co-heads share the same country of origin and employment) and so on. The analysis in the following chapters will attempt to unravel the confusion around perceptions of immigrant districts, and the various questions regarding the cases discussed here that have emerged from this chapter, as follows:

- Examination of the axial maps of the two cities has suggested that both had a similar north-south divide, with the immigrant districts of Leylands and Red Bank seeming to be especially separated from the rest of the city by physical means, such as railways and waterways. Indeed the similarity extends to both settlements being on low-lying land. The physical segregation of the Jews in Manchester and Leeds will be considered in the following chapter, which analyses the distribution of settlement in each of the cities and considers this both in absolute numbers and as a proportion of inhabitants per street.
- The review of class and economics in this chapter demonstrated a lack of clarity in the characteristics of poverty in the 19th century and suggested that some historians believed that there was not a sharp separation of middle and working classes in the period studied here, although others thought there was a clear-cut case of class division. Through analysis of a variety of definitions of class: by occupation, household structure, co-dependence and household size, the analysis in chapter 6 will address the question of whether poverty is linked to immigrant status and whether location in the immigrant district constitutes economic segregation from the rest of the city.
- This chapter has presented evidence about the support given by Jews who were already settled in the country to people from the same country or town of origin - 'landsleit'. This fits in with more general theories about mutual support amongst immigrant communities which were raised in chapter 2, including the practise of praying and socialising according to country of origin. Chapter 6 will analyse these theories from the point of view of both Jewish and non-Jewish foreign-born people, in order to see if patterns of co-dependence are especially typical of immigrant districts or more typical of the Jews. In addition, differences between primary and secondary settlement will be examined.
- Historical evidence suggests that the Jews were occupied in a narrow band of trades and separated in their work practices (especially tailoring). Various causes have been suggested: exclusion, poverty, or encouragement to enter certain trades due to the circumstances of apprenticeships. Through analysis of the occupation distribution in chapter 7 - of the immigrant versus established Jews and Jews versus non-Jews - the question of whether trade is linked to poverty or to status will be addressed. The immigrant districts will also be considered in comparison with the rest of each of the cities.
- Lastly, chapter 8 examines most of these questions again through six decades of settlement as well as studying the formation of settlement in Leeds through time.

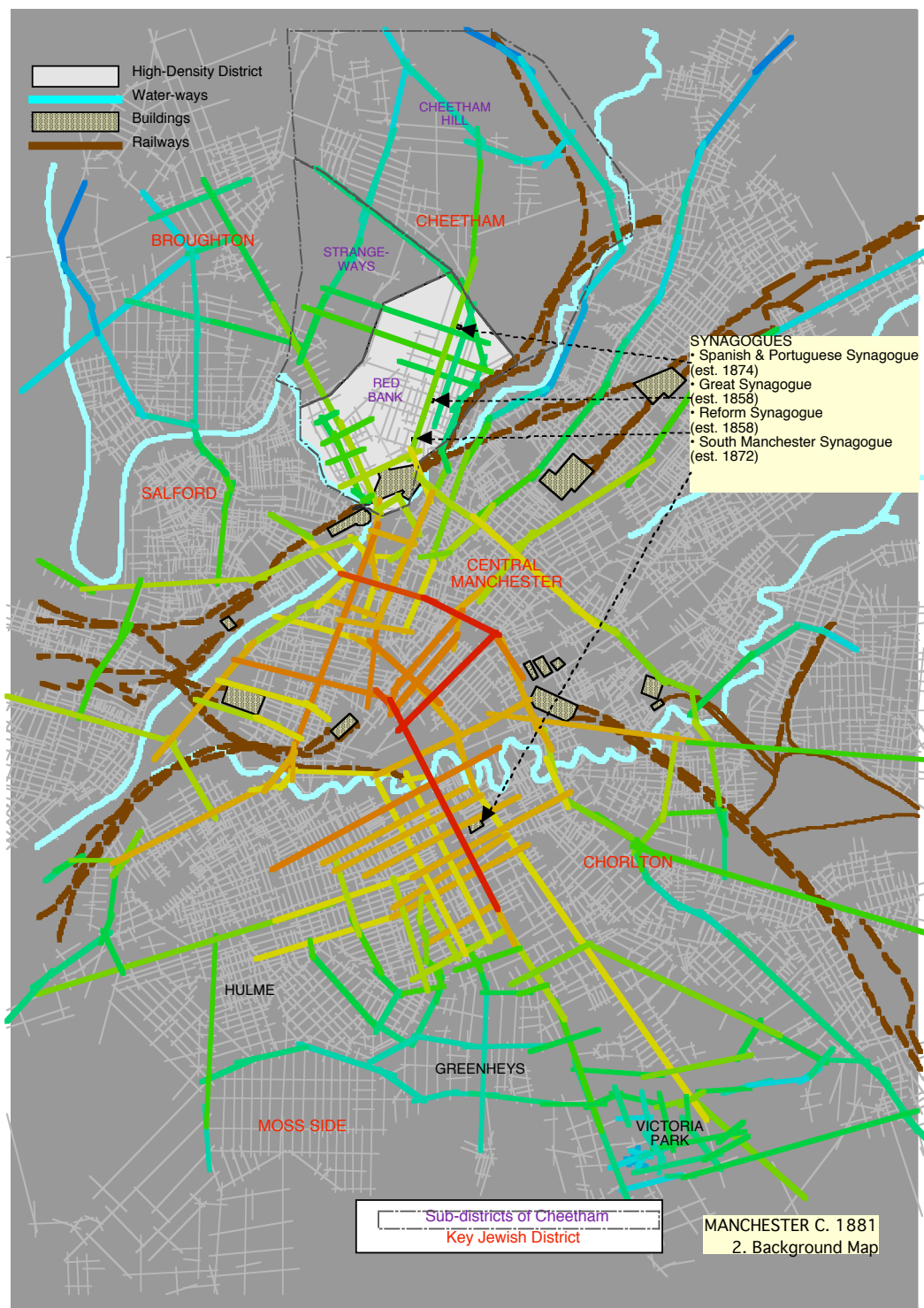


Plate 2: Manchester - Background Map.



Plate 3: Manchester - Streets with Jewish Inhabitants.

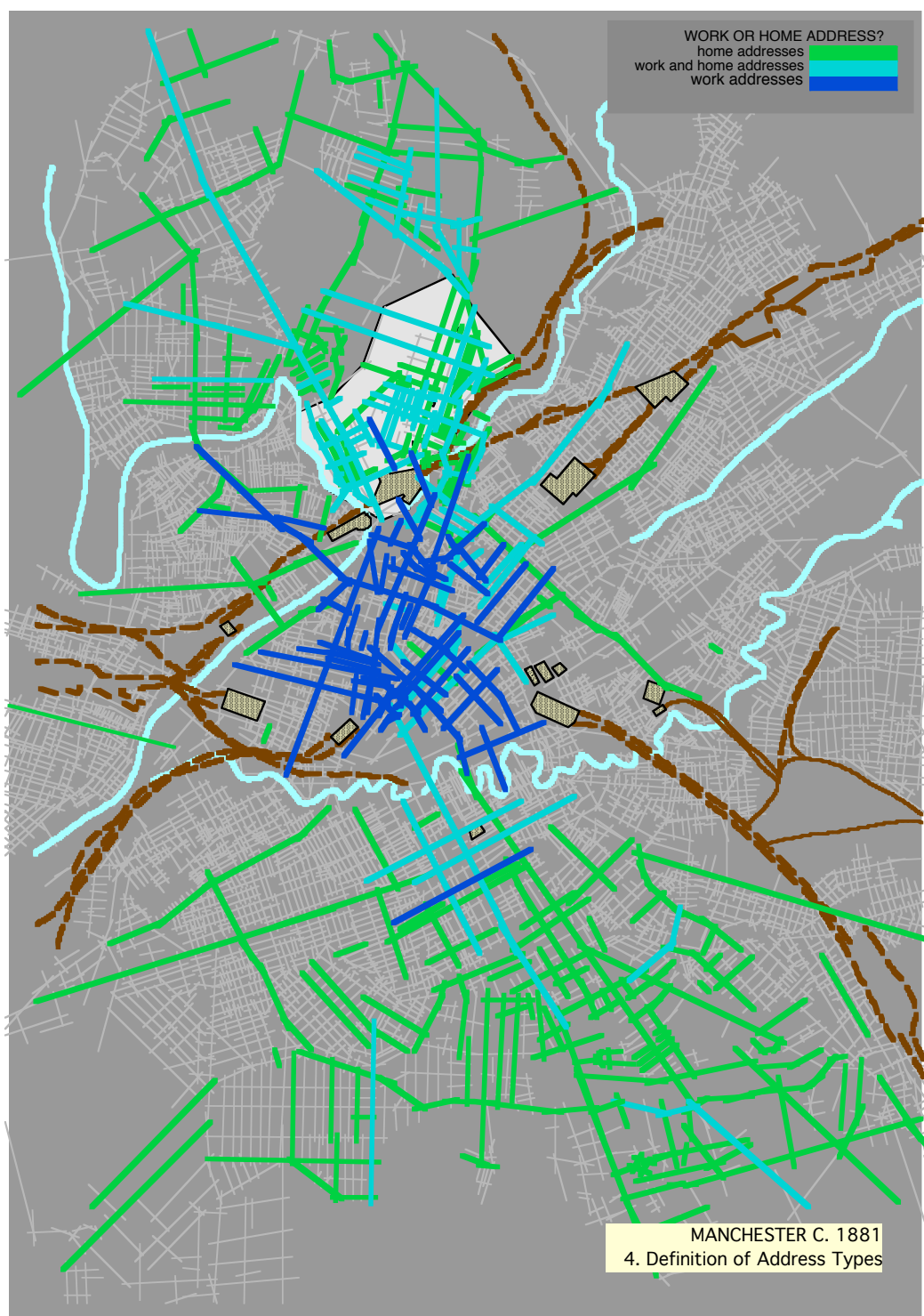


Plate 4: Manchester - Definition of Address Types.



Plate 5: Manchester - 'Red-Bank' Area.

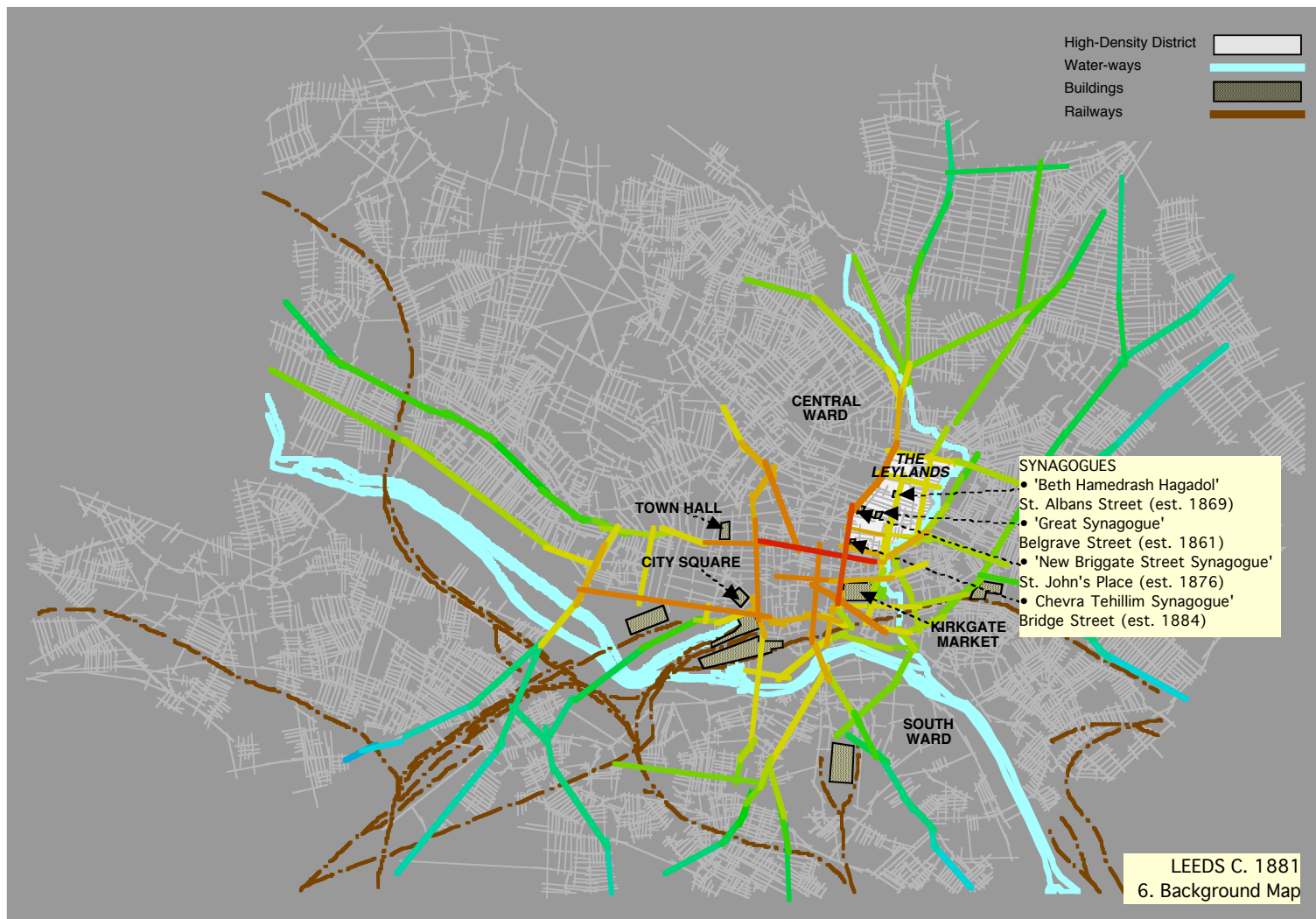


Plate 6: Leeds - Background Map.

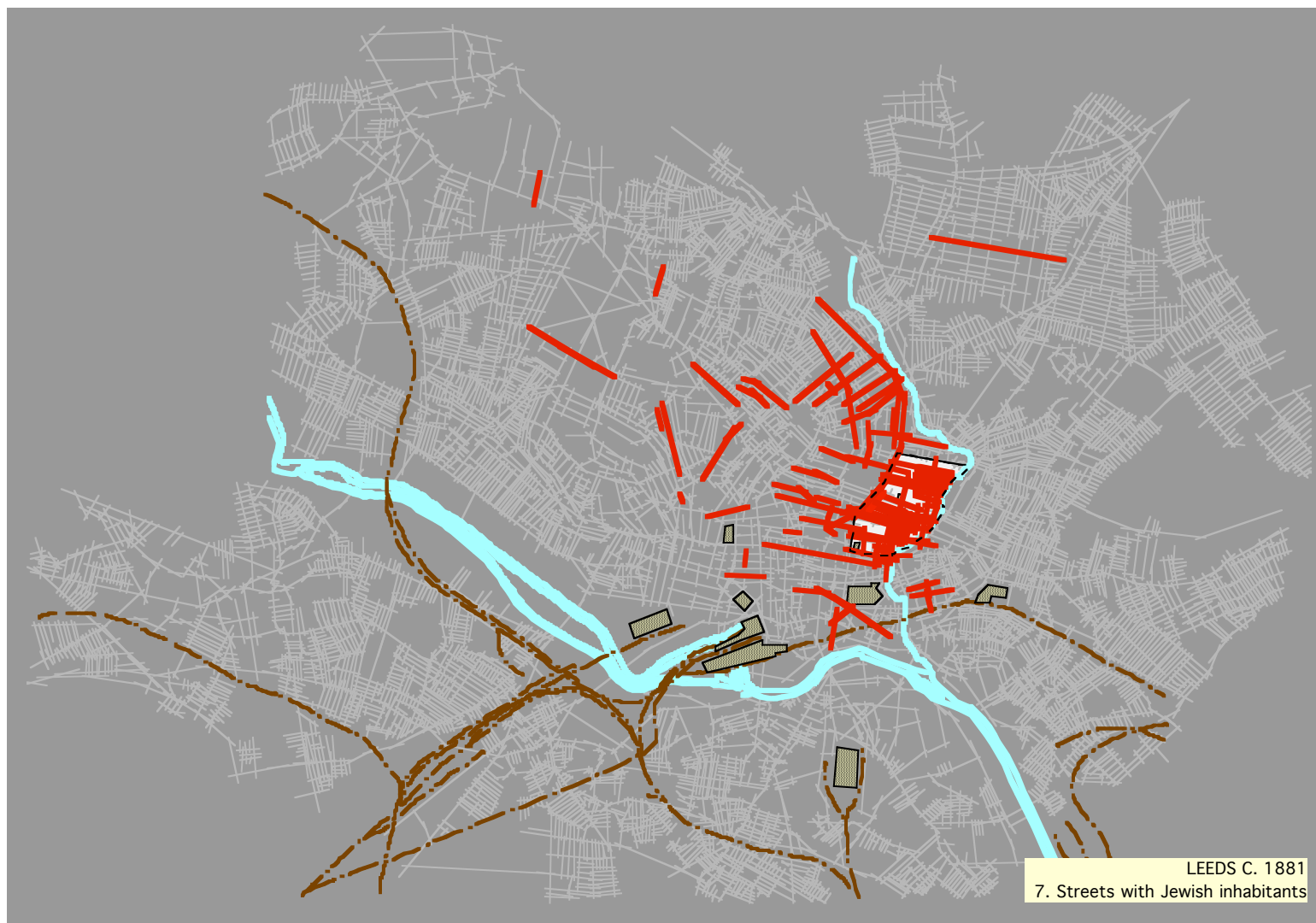


Plate 7: Leeds - Streets with Jewish Inhabitants.

CHAPTER 5

Analysis of Spatial Configuration: Manchester and Leeds 1881

1. Introduction

This chapter describes analysis of data on the total population of Jews in Manchester and Leeds and enquires into their patterns of settlement. The aim of the analysis in this chapter is to address the question whether clusters of minority population tend to be located in spatially segregated areas of the city. This chapter is the first of two analytical chapters which compare the Jewish settlements: first through analysis of data on relative ethnic density and then through analysis of data on social attributes. The aim of the two chapters is to examine the question of whether immigrant or minority clusters possess distinctive spatial and social attributes.

The first section describes the data and mapping sources for the analysis undertaken in this chapter and explains how they were obtained and compiled. The next section describes the spatial analysis of the two cities and investigates whether the areas historically considered ‘ghettos’ in each city differ spatially from other streets settled by Jews. This section also investigates whether the pattern of settlement in the ‘ghetto’ districts differed from settlement in the rest of the city. The last section analyses the relationship between ethnic and spatial properties: starting with data analysis of the number and characteristics of the Jewish population in each city, indicating how they differ from their co-residents, then analysing the relative density of Jews to non-Jews and lastly, analysing the relationship between relative density and spatial segregation.

2. Available Data

2.1 Available Data - Manchester

• Map Data

Space Syntax analysis was used to model the area of settlement by the Jews in a larger context. The boundary was determined by the limits of the built-up area of the city. The analysis used the following maps: Ordnance Survey maps from c. 1895 at 25” and reproductions of the central area 5’ maps from 1849.¹ Lancashire sheets 104.02, 104.03, 104.06, 104.07, 104.09, 104.10, 104.11, 104.12, 104.13, 104.14, 104.15, 104.16, 111.02, 111.02. The built up area of the city, based on this mapping, was 26.10 square kilometres². The spatial analysis was done by creating an axial map of the fewest, longest lines of permeability and visibility and analysing the resulting matrix for patterns of ‘integration’ with computer software called AxMan³. All streets with Jewish addresses in Manchester were then identified in the AxMan file, in order that the numerical results of the spatial analysis could be used for statistical analysis.

¹ For example, Dickinson (1908).

² The area was estimated based on taking the full extents of the axial map and measuring its area, to scale, using Carnarvon street (which was approximately 1000 feet long) as a guide.

³ See chapter above on methods for full explanation of the Space Syntax methods. AxMan was written by Nick Dalton at the Unit for Architectural Studies, UCL with funding from the SERC (now ESRC).

• **Data on Jewish Settlement in Manchester, 1881 (unpublished paper lists).**⁴

The lists of Jewish Residents were extracted by Bill Williams for research on his book, see Williams (1985a). The location of workplaces was also extracted from a list of addresses compiled by Bill Williams and his research team from the business directories of Manchester.⁵ These were also identified and marked in the AxMan map. Areas for search were selected by Williams by first looking at areas known to be Jewish and then all census lists for those areas were checked for Jewish sounding names. Then the trade directories were checked for all known 'Jewish' areas. Every area where a Jew was found was then covered in its entirety, by going through the enumerator's books that covered that area. For example, Red Bank, a known area of Jewish settlement, was covered by eight and a half enumerators' districts. Cross-checking was then made with communal lists, such as burial records. The lists used for this analysis are a minimum Jewish population and are more likely to have excluded Jews than included non-Jews.

• **Full census data on streets where the Jews reside in Manchester**

This data-set comprises the data on all residents in streets where at least one inhabitant had been identified as Jewish by Williams. The data-set was compiled in order to create a contextual background for the analysis in order to first, calculate the relative density of Jewish settlement and second, to compare social and economic data for the Jews with their non-Jewish neighbours. In addition, in the district of Red Bank, all streets were analysed (not only those with Jewish residents) in order to make an analysis of the entire neighbourhood cohort.

The full census data used in this chapter were made available by the ESRC Data Archive at the University of Essex, Colchester, Essex, which processed the electronic index of the 1881 census for the entire population of Great Britain.⁶ It should be noted that 11 Jews in 3 households were not found at the addresses found by Williams. This may be due to transcription errors made during the compilation of the 1881 census by the Genealogical Society of Utah. The 11 missing entries comprise 0.2% of the total Jewish population of Manchester, as counted by Williams.⁷ A description of the methodology for creating the data-sets on full census data can be seen in chapter 3.

2.2 Available Data - Leeds

• **Map Data**

Space Syntax analysis was used to model the area of settlement of the Jews of Leeds in a larger context. The boundary was determined by the limits of the built-up area. The analysis used the following maps: Ordnance Survey maps from c. 1895 at 25": Yorkshire sheets 203.13, 203.14, 203.15, 218.01, 218.02, 218.03, 218.05, 218.06, 218.07. The built up area of the city, based on this mapping, was 20.25 square kilometres⁸. This is about 80% of the size of the built up area of Manchester at the equivalent time. The axial map for the area comprises 5527 lines, which is much greater than the 4886 for the Manchester map - this is an indication of the more fragmented nature of this map; it is smaller in area than that of Manchester, but its spatial formation contains 13% more axial lines. All streets with Jewish addresses in Leeds were then identified in the AxMan file in order that the numerical results of the spatial analysis could be used for statistical analysis.

⁴ See Williams (1992).

⁵ Williams (1992). See chapter 3 on methodology for explanation of this data-set.

⁶ See: Genealogical Society of Utah (1997).

⁷ The total in question is 6884, based on the number of Jews counted by Williams in his hand-written transcriptions of the census.

⁸ The area was estimated in the same way as the Manchester map, using Byron Street (which was approximately 1000 feet long) as a guide).

- **Data on Jewish Settlement in Leeds, 1841, 1851, 1861, 1871, 1881, 1891 (electronic data sets)**

The compilation of these data was undertaken by Murray Freedman, a Leeds historian, who extracted and computed lists of Jews residing in Leeds at the time of each of the censuses from 1841 to 1891.⁹ Freedman examined census returns for the whole of Leeds on microfilm for each of the censuses- including returns for what were in 1851 and 1861 the outlying townships that are today's suburbs. After identifying Jewish sounding names, he then cross-checked these with 'contemporary press reports, marriage registers, surviving synagogue minute books, burial records, gravestones, Leeds directories and voters' rolls' in order to verify that people with Jewish sounding names were indeed associated with the community¹⁰.

- **Full census data on the streets in which the Jews resided in Leeds**

As for the Manchester data, contextual data on the full 1881 census records for streets in which Jews lived in Leeds and for all streets in the district of the Leylands were made available by the ESRC Data Archive at the University of Essex, Colchester, Essex, which provided a similar data-set to that described above for Manchester¹¹. A description of the methodology for creating the data-sets on full census data can be seen in chapter 3. It should be noted that 45 Jews in 8 households and one additional Jew living in a non-Jewish household were not found at the addresses identified by Freedman. This may be due to transcription errors made during the compilation of the 1881 census by the Genealogical Society of Utah. The 46 missing entries comprise 2.5% of the total Jewish population of Leeds, as counted by Murray¹²

3. Spatial Analysis

The purpose of this section is to investigate whether the areas historically considered 'ghettos' in Manchester and Leeds - respectively 'Red Bank' and 'Leylands' - differ spatially from other streets settled by Jews in each of the cities.

3.1 Spatial Analysis - Manchester

Plate 9 shows the axial map of Manchester on a background of the 6 districts of Manchester in which there was significant Jewish settlement. The districts were defined according to the historical maps of Manchester. In addition, the district of Cheetham was split into three to enable analysis of the district of Red Bank (the main subject of analysis due to its classification historically as a 'ghetto' district) in contrast with the lower middle-class district of Strangeways and the semi-rural district of Cheetham Hill.

The results of the axial analysis of Manchester can be seen in plates 10 and 11, which show global and local integration and in plate 12, which shows radius-radius integration. Following is a summary of some of the key terms used in axial analysis:

1) Integration measures the mean depth from each line in a system to all other lines. This is termed *integration radius n* (infinity), or *global integration*;

2) A version of integration, termed *integration radius 3* or *local integration*, restricts the measurement of routes from any line to only those lines that are up to three lines away from it. This measures the localised importance of a space for access within a particular part of a building or urban network;

⁹ See for example Freedman (1994).

¹⁰ See Freedman (1994), p.2.

¹¹ See: Genealogical Society of Utah (1997).

¹² The total in question is 2937. See Freedman (1992), p. 30.

3) *Radius-radius* integration measures integration up to x changes of direction away, when x is the mean depth from the most integrated line in the system. Radius-radius integration is normally calculated in order to eliminate problems of the 'edge effect' in radius n maps. The 'edge effect' describes the fact that the edge of axial models tends to seem segregated due to the fact that streets on the edge of the map are not connected onwards (note how in plate 10 there are large patches of blue lines around the edge of the map, especially to the north);

4) *Connectivity* is the simplest measure of all and measures the number of lines that intersect with each line in the system;

5) *Depth* (sometimes called *step-depth*) measures the number of changes of direction any line in a system is away from a selected line or lines;

6) *Control* is a local measure which measures relative connectivity of a line as compared with the connectivity of that line's neighbours.

Plate 10 shows the distribution of global (radius n) integration throughout the axial map of Manchester: streets coloured in the warm range indicate high rates of integration and streets coloured in the cool range indicate low rates of integration.

- We see in plate 10 that the core of global integration, the lines coloured red and dark orange, is located in the geographical centre of Manchester (which was the central business district of the time) but also covers more southerly areas; namely the northern area of Moss Side and Chorlton (which were middle-class districts at the time - see plate 9).
- We also see that the district of Red Bank, coloured grey, is removed from the global integration core and that it is on the edge of the map, which contains many streets in the blue-segregated range.

Plate 11 shows the distribution of radius 3 integration throughout the axial map of Manchester, where streets are coloured up from warm to cold according to how well integrated they are locally. Plate 12 shows radius-radius (8) integration. This map was made since it was evident from the global integration map that the global integration analysis of the Red Bank district might be suffering from distortion due to 'edge effect'. According to Hillier (1996) 'the effect of a radius-radius analysis is to maximise the globality of the analysis without inducing 'edge effect', that is the tendency for the edges of spatial systems to be different from interior area because they are close to the edge.'¹³

- In plate 11 we see that the fingers of routes out of Red-Bank seem to hold many of the key local integrators and in plate 12, we see that the distribution of radius 8 integration is mainly contained south of the railways and canals. In other words, the distribution of maximum local integration only covers the main routes in the Red Bank district.
- We see that the district called Red Bank, marked in grey, is not located in the geographical or spatial core of the city, and is removed to the north east. The relative spatial isolation of the district is due to its location north of the River Irk which runs through Manchester and its location north of the main railway tracks leading to Victoria Station (which is the building exactly on the southern boundary of Red Bank).

Figures 2.1 and 2.2 overleaf show the scattergrams of global (radius n)/local (radius 3) integration for the Manchester model as a whole, first highlighting streets with Jewish addresses throughout the city, split by district, with each district shown by a different colour and symbol and then highlighting only the Red-Bank

¹³Hillier (1996), p. 163.

district as a whole, in blue. Correlations between local and global integration are normally done for a named district within a city. High R^2 results indicate a strong correspondence between local and city-wide patterns of movement and that there is a mix of 'inhabitants' and 'strangers' along the main streets of the district in question. This is termed 'intelligibility' according to Space Syntax methodology. Here the correlations were made to test the theory that Jews migrate to streets with a higher than normal rate of intelligibility.

In figure 2.1 the R^2 value for the scattergram, split by Jewish and non-Jewish streets suggests that none of the districts show a significant rate of intelligibility. In figure 2.2 we see the same scattergram, except that here only the streets settled by Jews in Red Bank are highlighted in blue dots. Here we see a tighter regression but still without a significant correspondence between local and global measures. This suggests that local patterns of movement do not relate to global patterns.

Table 1.1 summarises the spatial values for the Manchester study; further data were compiled by comparing the spatial characteristics of each key Manchester district with the model as a whole, in table 1.2. The mean values for each district were arrived at by selecting only those streets in which the Jews lived in each district, and calculating the mean spatial values for those.¹⁴ Analysis of step-depth from the most globally integrated line was also undertaken, in order to discover the degree of permeability from the integration core of the city to the area of settlement for Jewish streets in each district. (In step-depth analysis, the higher the depth value, the more distant the streets are, on average from the street from which the measure is taken.)

¹⁴ The higher the t-value the higher the degree of difference from the comparison group. A negative t-value indicates a mean value which is lower than the comparison group.

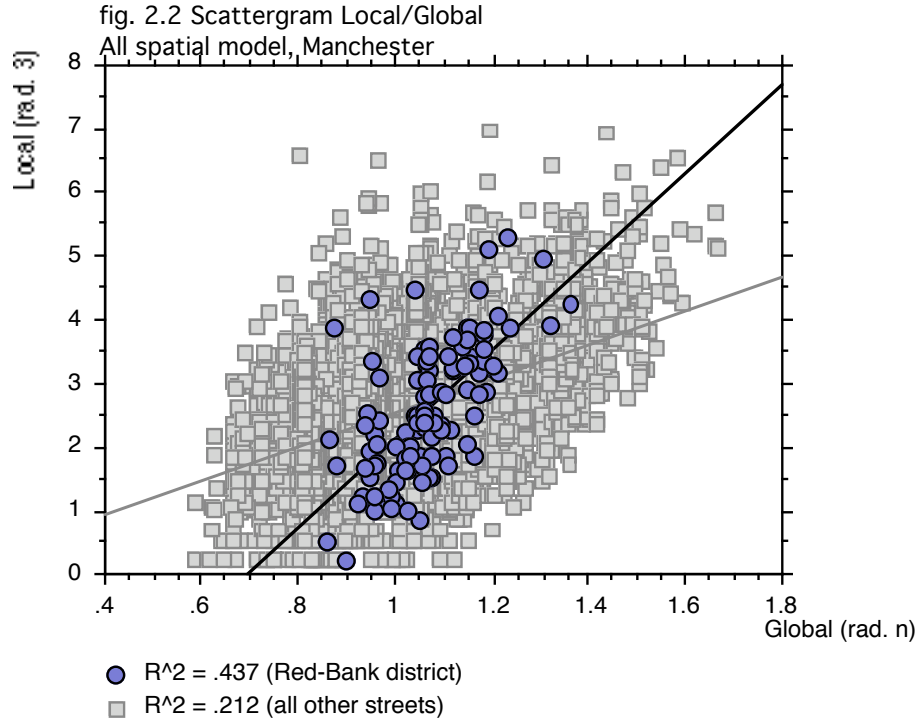
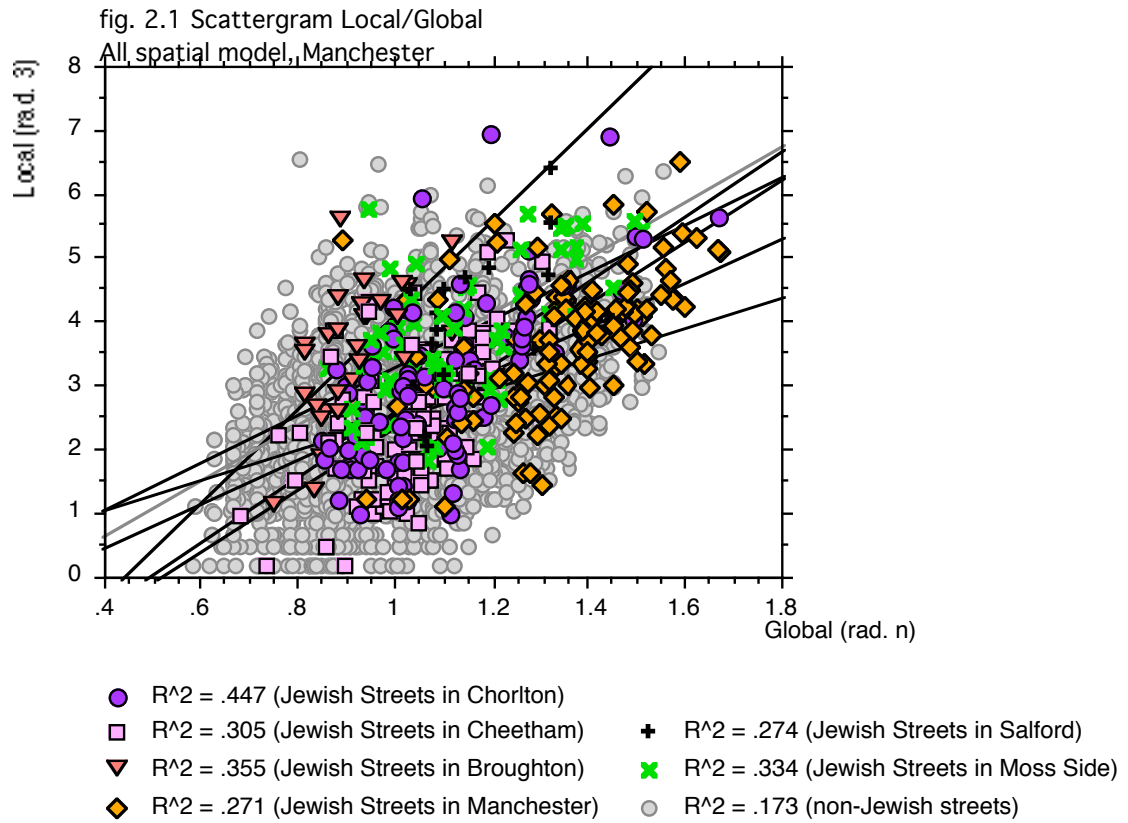


Figure 2. Scattergrams of Spatial Integration: All Manchester.

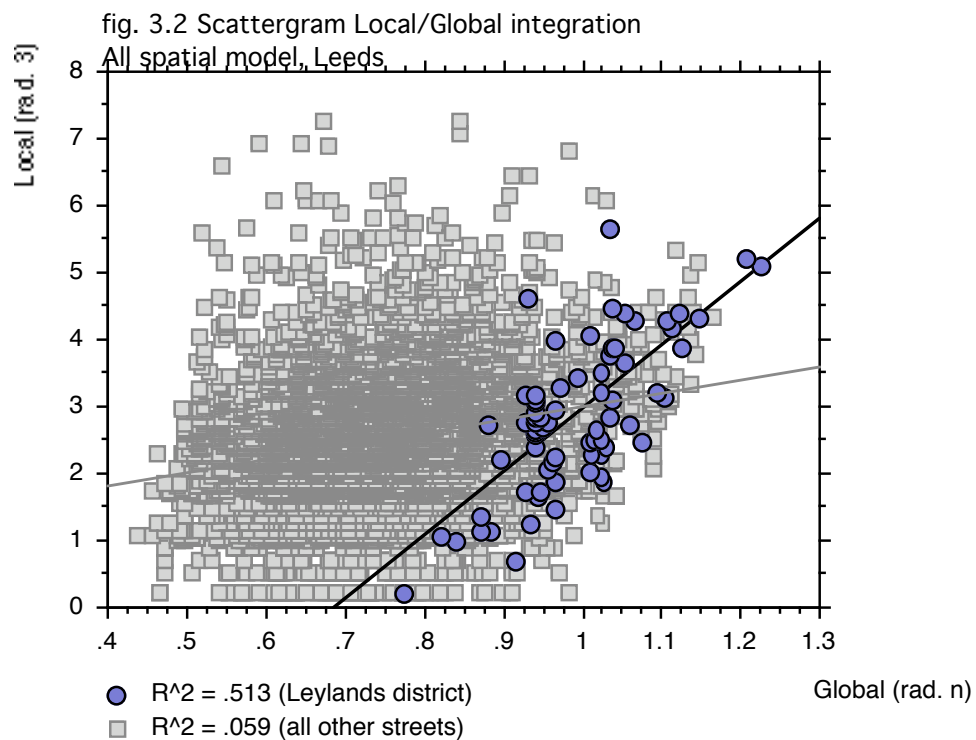
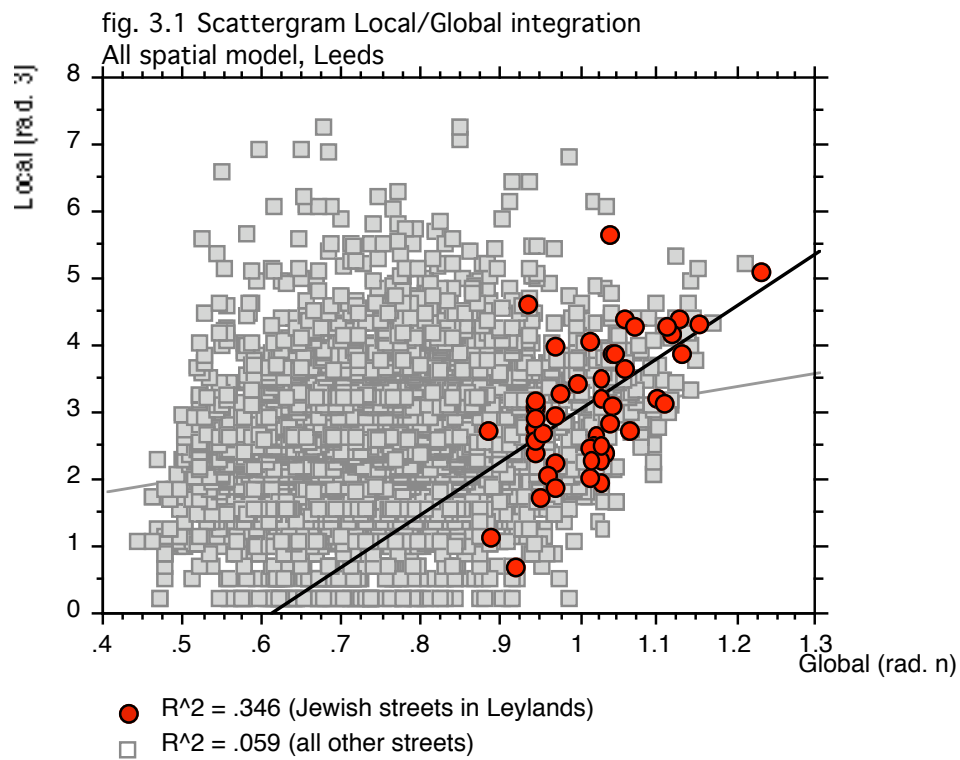


Figure 3. Scattergrams of Spatial Integration: All Leeds.

Table 1: Summary of Mean Spatial Values, Manchester¹⁵					
1.1 Comparison of Jewish streets in Manchester with model as a whole ¹⁶					
	GLOBAL (radius n)	LOCAL (radius 3)	RAD-RAD (radius 8) ¹⁷	DEPTH FROM GLOBAL> IN MODEL ¹⁸	LINE LENGTH: PIXELS
Spatial model as a whole	1.022	2.595	1.544	7.800	21.39
'Jewish' home and home/work addresses	1.098	3.162	1.625	7.195	59.59
t-tests ¹⁹ comparing Jewish home and home/work addresses to spatial model ²⁰	p<.0001	p<.0001	p<.0001	p<.0001	p<.0001
'Jewish' work addresses ²¹	1.370	3.815	1.801	4.383	49.943
t-tests comparing Jewish work addresses to spatial model	p<.0001	p<.0001	p<.0001	p<.0001	p<.0001

Table 1.1 suggests that all spatial measures are significantly greater for the Jewish streets than for the model as a whole. This finding replicates findings for previous studies of Jewish areas. This finding is also similar to a study made comparing Jewish to Irish settlement in Leeds 1851/1861 [see Vaughan (1998)], which found that Jewish streets were significantly longer than average. We also see that the work addresses are consistently more integrated than the home addresses (t-tests comparing work and home addresses showed a significant difference of $p=.0001$), except for the case of street length, which is lower for work addresses ($p=.0413$). The latter is probably due to the location of work addresses in the central area - which has shorter streets. The question of the spatial attributes of Jewish work addresses is looked at in greater detail in the chapter on occupations in Manchester, chapter 7. The findings on the home addresses are expanded upon below.

Table 1.2 analyses mean spatial values for each district in turn. See plate 9 for definition of those districts. Here we see that if we take the Jewish streets in each separate district, all except for Broughton and Cheetham, have significantly greater spatial values than average for the model as a whole. Table 1.2 shows the values in large case; below each value the results of t-tests are given. The top value for each measure is highlighted in bold and bottom values are underlined.

¹⁵The notes to this chapter explain the manner in which statistics were compiled. For a full explanation, see appendix on compilation methods.

¹⁶ Means were taken from the computer file in which all identified streets in which Jews lived and worked were assigned spatial and 'ethnic' values.

¹⁷In this case the mean depth of the map is 7.8, so the radius-radius map shows radius 8 analysis of the spatial map of Manchester.

¹⁸Depth was calculated from the most globally integrated line in the entire spatial model.

¹⁹ A t-test is a standard statistical test of probability and works by comparing the mean value of a group with the mean value of the population as a whole, and asking how likely it is that the mean of the smaller sample would have been arrived at by chance. 'p' values of less than 0.05 denote a result which is considered 'highly significant'. It should be noted that this and other statistical tests were made using standards of proof common to the social sciences but, as pointed out by Matthews (1998), the question of subjectivity should always be taken into account when interpreting results, rather than simply relying on a number as a standard of proof.

²⁰ In this case only home addresses were included in the calculation. (Some home addresses were on streets on which Jews both lived and worked.)

²¹ In this case only work addresses were included in the calculation.

Table 1: Summary of Mean Spatial Values, Manchester					
1.2 Comparison of mean values for Jewish streets (excluding work addresses) per district, with values for model as a whole.					
	GLOBAL (radius n)	LOCAL (radius 3)	RAD-RAD (radius 8)	DEPTH FROM GLOBAL> IN MODEL	LINE LENGTH
<i>Spatial model</i>	<i>1.022</i>	<i>2.595</i>	<i>1.544</i>	<i>7.800</i>	<i>21.39</i>
Jewish Broughton	<u>.892</u> p<.0001	3.310 p=.0095	1.530 insignificant	<u>10.333</u> p<.0001	78.58 p=.0094
Jewish Cheetham	1.043 insignificant	<u>2.716</u> insignificant	<u>1.489</u> p=.0019	8.330 p<.0001	<u>43.74</u> p<.0001
Jewish Chorlton	1.141 p<.0001	3.256 p<.0001	1.742 p<.0001	6.143 p<.0001	79.47 p<.0001
Jewish Manchester	1.258 p<.0001	3.277 p=.0006	1.692 p<.0001	5.447 p<.0001	47.98 p=.0118
Jewish Moss Side	1.104 p=.0011	3.661 p<.0001	1.723 p<.0001	6.349 p<.0001	75.25 p<.0001
Jewish Salford	1.157 p=.0177	4.034 p=.0155	1.713 p<.0001	6.750 p<.0001	96.00 p=.0417

Following is an explanation of the key findings in table 1.2:

- Cheetham, which includes the Red Bank area, is not significantly different than average for global and local integration and its radius 8 integration is significantly lower than average. (When the Jewish streets of the Red Bank area were selected on their own, it was found that the results were very similar to Cheetham overall, with all measures only fractionally higher - except for depth from the global core, which was fractionally lower.) An indication of its character as a 'classic slum' is that its streets are the shortest of all areas, except central Manchester. Other than semi-rural Broughton, this is the area most axially distant (if we consider step depth) from the global core - this finding reinforces the statement by Williams quoted in the previous chapter, that this area was rendered invisible by its geography.
- Chorlton has the highest mean value of radius-radius integration. It also performs well for all other spatial measures and has relatively long streets (an indication of the middle class type housing in the area. Moss Side performs like Chorlton, with significantly higher spatial values than average and relatively long streets.
- Of all the districts, central Manchester performs best for global and distance from global core. Considering that as shown in plate 10, the global core is located in the centre of Manchester, this is not surprising. The shortest street length is a reminder that this was the location of the original settlement of the city of Manchester.
- Broughton, which had a very small number of Jewish streets had the lowest global integration and was most distant from the global core. Its other spatial measures were also amongst the lowest.

Table 1.3 compares each district to the mean spatial values for all axial lines in that district (see plate 9 for definition of geographical districts). Table 1.3 shows the values in large case; below each value the results of t-tests are given.

Table 1: Summary of Mean Spatial Values, Manchester		
1.3 Comparison of mean values for Jewish streets per district, with values for all streets in district. ²²		
	GLOBAL (radius n)	LOCAL (radius 3)
<i>All lines in Broughton</i>	.846	2.416
Jewish Broughton	.892	3.310
	p=.0112	p<.0001
<i>All lines in Cheetham</i>	.978	2.325
Jewish Cheetham	1.043	2.716
	p<.0001	p<.0001
<i>All lines in Chorlton</i>	1.046	2.465
Jewish Chorlton	1.141	3.256
	p<.0001	p<.0001
<i>All lines in Central Manchester</i>	1.273	2.842
Jewish Central Manchester	1.258	3.277
	insignificant difference	p=.0223
<i>All lines in Moss Side</i>	1.088	2.777
Jewish Moss Side	1.104	3.661
	insignificant difference	p<.0001
<i>All lines in Salford</i>	.992	2.490
Jewish Salford	1.157	4.034
	p=.0070	p=.0113

The results presented in table 1.3: suggest that taking each district in turn, the mean global and local integration values for each set of Jewish streets is significantly greater than for the area in which they are situated, as a whole. The only exception to this result is for Central Manchester global integration - which can be explained by this district being close to the global integration core and for the small number of Jewish streets in this case. We also see that the streets of Moss Side have an insignificantly greater mean global integration. Even in Cheetham, the area which is overall considered to be cut off from the city, we find that the Jewish streets are significantly more globally and locally integrated than the area as a whole.

Table 1.4 compares mean global and local integration for the sub-areas of Cheetham: Red Bank, Strangeways and Cheetham Hill. See plate 9, which indicates the location of the three sub-areas, with the district of Red Bank comprising the streets to the south and south-east of the area of Cheetham.

Table 1: Summary of Mean Spatial Values, Manchester		
1.4 Comparison of mean values for Jewish streets per sub-districts of Cheetham, with values for all streets in Cheetham. Top values in bold; bottom, underlined.		
	GLOBAL (radius n)	LOCAL (radius 3)
<i>All lines in Cheetham</i>	.978	2.325
Jewish Red Bank	1.066	2.788
	p<.0001	p=.0045
Jewish Strangeways	1.106	<u>2.679</u>
	p<.0001	p=.0448
Jewish Cheetham-Hill	<u>.927</u>	2.568
	p=.0157	p=.0490

The results in table 1.4 suggest that taking each sub-district in turn, the Jewish streets of each of the sub-districts of Cheetham have higher integration values when considering all streets in Cheetham. It is also interesting to find that Red Bank, the principle area of Jewish settlement (with 2699 Jewish inhabitants), has the highest local and second highest local integration values, both of which are significantly higher than the area as a whole. This suggests that despite perceptions to the contrary of Red Bank as the 'classic slum' (as described in the previous chapter) that the Jewish streets in this district were not spatially segregated.

Due to the contrast between historical perceptions and these results of spatial analysis, it was decided to

²² Note for tables 1.3, 1.4: mean values for the spatial district as a whole were used, but work addresses were excluded.

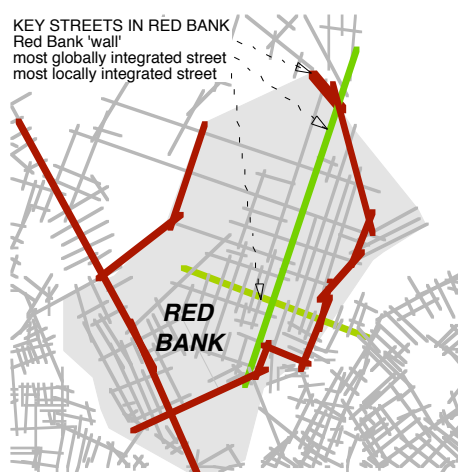
analyse the district of Red Bank in greater detail, so that rather than comparing streets with Jewish addresses with all streets in the district, that comparison would be made between Jewish households and non-Jewish households in the same street. Tables 1.5 and 1.6 show a comparison of mean spatial values for Jews and non-Jews per household. Here spatial values were weighted according to the number of Jewish cases that appeared in each street and the number of Jewish households in a street was built into the calculation and thus consideration was given to ethnic density (the proportion of Jewish to non-Jewish households). The number of households were: Jewish n=436; non-Jewish n=1174. The following two tables shows a more complex set of results than found up to now when comparing Jewish to non-Jewish addresses.

Table 1: Summary of Mean Spatial Values, Manchester²³					
1.5 Comparison of mean values for Jewish households to non-Jewish households in Red Bank.					
	GLOBAL (radius n)	LOCAL (radius 3)	RAD-RAD (radius 8)	LINE LENGTH	CONTROL
Jewish households	1.084	2.980	1.543	49.69	1.431
non-Jewish households	1.098	3.142	1.489	53.07	1.605
t-tests comparing Jewish to non-Jewish	p=.0098	p=.0110	p<.0001	insignificant	p=.0259

In table 1.5 we see that the higher values (marked in bold type) tend to occur in the non-Jewish households, rather than the Jewish households. We also see that these differences tend to be statistically significant. The only exception to this is the measure for rad-rad (radius 8), which shows a significantly higher rate for Jewish than for non-Jewish streets and line length, which is not significantly different, although higher for non-Jewish households. Considering that radius 8 integration calculates relative depth for each street in the system up to 8 steps away, it is likely that this measure is helping to normalise the edge effect in the Manchester model and it may be surmised that radius 8 is a more precise measure than global integration when considering the Red Bank district. And since the Red Bank district is located towards the northern edge of the map in the Manchester model, this may explain why there is a disparity between radius n and radius 8 integration. In summary, the results shown in table 1.5 suggest that Jewish households tend to be less locally integrated than their neighbours, but more globally integrated than average (if we consider the radius 8 results as indicative of global integration).

Table 1.6, which concentrates on depth values, shows four measures of depth: 1) depth from the most globally integrated line in the city as a whole, shown in first column below, which was calculated in order to investigate axial distance from the spatial core of the city as a whole. The remaining columns show: columns 2) and 3) depth from the most globally and locally integrated streets within Red-Bank, which were measured in order to investigate relative proximity to the main streets within the area and column 4) depth from the boundary of the district, which was measured in order to simulate how far streets in Red-Bank were distant from its perimeter. See diagram *a* below, which shows the ‘wall’, most globally integrated street and most locally integrated street.

²³These t-tests were made in a computer file which summarises data per household and then repeats the spatial values per axial line for all the households in each street



a. key streets in Red Bank

Table 1: Summary of Mean Spatial Values, Manchester ²⁴				
1.6 Comparison of mean values for Jewish households to non-Jewish households in Red Bank, continued.				
	DEPTH FROM GLOBAL> IN MODEL ²⁵	DEPTH FROM RED BANK' WALL' ²⁶	DEPTH FROM LOCAL> IN RED BANK ²⁷	DEPTH FROM GLOBAL> IN RED BANK ²⁸
Jewish households	7.610	2.175	2.604	2.912
non-Jewish households	7.680	2.460	2.874	2.983
t-tests comparing Jewish to non-Jewish	insignificant	p<.0001	p<.0001	insignificant

The results shown in table 1.6 suggest that Jewish households tend to be closer to the main streets and to the perimeter of the Red Bank district than their non-Jewish counterparts and that the difference is statistically significant in the case of local integration and distance from the perimeter (lower depth means closer to the point of origin). These findings continue on from those above in table 1.5 and suggest that despite relative segregation when considering pure spatial values, Jewish households tend to be shallower to main streets than non-Jewish households.

In summary, the spatial analysis of Manchester has suggested that in general, streets with Jewish households tend to be more spatially integrated than average for the city and for the district of Red Bank. However, it has also been shown that this finding is not maintained once streets are weighted for density. Further spatial analysis of axial proximity to main integrators and boundary again showed a higher measure for Jewish households. These differences suggest a relationship between relative density and spatial integration; this possibility is examined in section 4 below .

3.2 Spatial Analysis - Leeds

The results of the axial analysis of Leeds can be seen in plates 13 and 14, which show global and local integration and in plate 15, which shows radius-radius integration.

²⁴These t-tests were made in the same file as in table 1.5.

²⁵See note on depth for table 1.1 above.

²⁶Here depth was calculated from the ghetto 'wall', which was defined as all the streets that lie on the perimeter of the Red Bank area, as follows: Bent Street; Broughton Street; Elizabeth Street; Great Ducie Street; Johnson Street; New Bridge Street; North Street; Park Street; Red Bank; Sherbourne Street.

²⁷Here depth was calculated from the most locally integrated street within Red Bank: Lord Street.

²⁸Here depth was calculated from the most globally integrated street within Red Bank: York Street.

- Whereas in Manchester, the global integration core was located in the geographical centre of the city, in Leeds we see in plate 13 that the core is located just north of the centre; north of the river and railway lines. This difference brings about a closer proximity between the Leylands district (marked in grey), and the spatial centre of the city, than was seen above for Manchester.
- However, we also see in plate 13 that the global core - defined here as the axial lines coloured red, dark orange and light orange, skirts the Leylands district to the south and west, but does not penetrate it. Plate 14 demonstrates that the main local integrators around the Leylands tend also to not penetrate the area, except for one street that runs north to south through the east side. The rad-rad map in plate 15 demonstrates that here also the main integrators skirt the district, but generally do not penetrate the Leylands.

Figures 3.1 and 3.2 show the scattergrams of global (radius n)/local (radius 3) integration for the Leeds model as a whole, first highlighting streets with Jewish addresses within Leylands, in red. and has a separate R^2 value given underneath. As in Manchester, the Jewish streets taken as a group do not perform significantly better for the measure of intelligibility. Figure 3.2 shows the same scattergram, but here the area of Leylands as a whole is highlighted in blue and has a separate R^2 value given underneath. Here we do see a more marked improvement for the Leylands district taken alone, although this finding must be considered in the light of the fact that a smaller number of streets would tend to give a better R^2 result in any case. Overall, the R^2 value suggests a trend towards correspondence, but this is still an insignificant result. In other words, the Leylands district was not spatially intelligible.

Table 2.1, below, summarises the spatial values for the Leeds axial analysis comparing Jewish streets in Leeds to the spatial model as a whole and then comparing only Jewish streets in Leylands with the model as a whole.

Table 2: Summary of Mean Spatial Values, Leeds					
2.1 Comparison of Jewish streets in Leeds and within Leylands with model as a whole ²⁹					
	GLOBAL (radius n)	LOCAL (radius 3)	RAD-RAD (radius 10)	DEPTH FROM GLOBAL> IN MODEL ³⁰	LINE LENGTH: PIXELS
<i>Spatial model</i>	<i>0.745</i>	<i>2.491</i>	<i>1.254</i>	<i>10.032</i>	<i>16.54</i>
'Jewish' addresses	0.960	2.831	1.391	5.266	21.63
t-tests comparing Jewish addresses to spatial model	p<.0001	p<.0001	p<.0001	p<.0001	p<.0001
'Jewish' Leylands	0.981	2.810	1.409	5.048	19.46
t-tests comparing Jewish addresses to spatial model	p<.0001	p=.0077	p<.0001	p<.0001	insignificant

This table suggests that streets in which Jews lived were significantly more integrated, both globally and locally, than average for the city as a whole. They were also shallower than average from the most globally integrated line (indicated by step depth). Lastly, we see that they were longer than average. All these findings replicate those found above for Manchester.

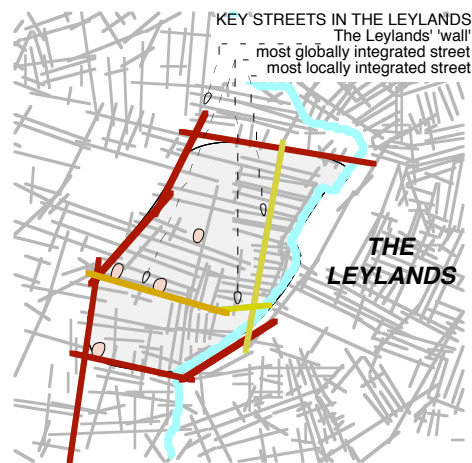
The parallel of Red Bank in Manchester, was the Leylands district, which was historically the area in which large numbers of Jews settled in the city³¹. Tables 2.2 and 2.3 repeat the analysis done for Red Bank in

²⁹ T-tests were made in a computer file which takes the spatial data from AxMan and identifies which are Jewish addresses; and which are Jewish addresses within the dense area.

³⁰Depth was calculated from the most globally integrated line in the entire spatial model.

³¹Indeed, this area contained 82% of the Jewish population in 1881.

Manchester, by taking the area of the Leylands (with 2371 Jewish inhabitants) and considering it separately. Like Red Bank, Leylands suffered from a negative reputation and was considered a very poor district long before the Jews arrived (it had previously been settled by Irish immigrants in the main, see chapter 4). The following tests the spatial measures within the Leylands, to see if the findings of table 2.1 are repeated. See diagram *b* below, which shows the ‘wall’, most globally integrated street and most locally integrated street in the Leylands.



b. key streets in the Leylands.

Table 2: Summary of Mean Spatial Values, Leeds ³²					
2.2 Comparison of mean values for Jewish households to non-Jewish households in Leylands.					
	GLOBAL (radius n)	LOCAL (radius 3)	RAD-RAD (radius 10)	LINE LENGTH	CONTROL
Jewish households	0.991	2.887	1.416	29.39	1.001
non-Jewish households	1.012	3.245	1.459	41.06	1.542
t-tests comparing Jewish to non-Jewish	p<.0001	p<.0001	p<.0001	p<.0001	p<.0001

Tables 2.2 and 2.3 show a comparison of mean spatial values for the two groups per household. By using a table of spatial values per household, per street, spatial values were weighted according to the number of Jewish cases that appeared in each street. (The number of households and proportion of Jewish to non-Jewish were very similar to those in Red Bank: Jewish n=395; non-Jewish n=1390).

Table 2: Summary of Mean Spatial Values - additional depth values, Leeds				
2.3 Comparison of mean values for Jewish households to non-Jewish households in Leylands.				
	DEPTH FROM GLOBAL> IN MODEL ³³	DEPTH FROM THE LEYLANDS 'WALL' ³⁴	DEPTH FROM LOCAL> IN THE LEYLANDS ³⁵	DEPTH FROM GLOBAL> IN THE LEYLANDS ³⁶
Jewish households	4.868	2.710	2.760	3.460
non-Jewish households	4.741	2.482	2.990	3.368
t-tests comparing Jewish to non-Jewish	p=.0500	p<.0001	p<.0001	marginally insignificant

The results shown in table 2.2 suggest that the higher values (marked in bold type) tend to occur in the non-Jewish households, rather than the Jewish households. We also see that these differences tend to be statistically significant. The results given in table 2.3 suggest that all measures for non-Jewish households

³²The t-tests here were made in the statistical file which summarises data per household and then repeats the spatial values per axial line for all the households in each street.

³³See note on depth for table 3 above.

³⁴Here depth was calculated from the ghetto 'wall', which was defined as all the streets that lie on the perimeter of the Leylands area, as follows: Lady Lane; North Street, Quarry Hill, Skinner Lane, Vicar Lane.

³⁵Here depth was calculated from the most locally integrated street within Leylands: Regent Street.

³⁶Here depth was calculated from the most globally integrated street within Leylands: Hope Street.

are greater than Jewish households (although the difference is not statistically significant for depth from the most globally integrated street in the Leylands). The only exception to this is depth from the most locally integrated street within the district, which suggests that, as in Red Bank, Jewish streets are shallower to the local integration core than non-Jewish households. These results are similar to those for Red Bank in Manchester although in this case, unlike Manchester, the differences are significant even for radius-radius and line length.

This section has concentrated on spatial analysis of Jewish settlement in each of the cities and distinguished between the areas of initial settlement and those of secondary settlement. In the first instance it has been shown that Jewish addresses tend to be more spatially integrated than average. However this relationship did not continue when Jewish streets were weighted by the number of Jewish addresses - thus building in the question of density; instead, Jewish households tended to be more spatially segregated than their non-Jewish Leylands neighbours, especially in the case of the newer settlement in Leeds yet, were located in streets closer to the integration core and to the perimeter of each of the areas of Red Bank and Leylands. These findings pose the question of whether, if we define density as the proportion of Jewish to non-Jewish households per street, there is a difference between the spatial integration of high density streets and low density streets. The following two sections look at this, by analysing the relative density of Jewish to non-Jewish households with relation to spatial parameters.

4. Spatial and Ethnic Analysis

4.1 Spatial and Ethnic Analysis - Manchester

• Ethnic Analysis - Manchester

Plate 16 shows the total number of Jews in each street in which they resided, coloured up in bands from blue to red; here we see that despite the fact that Jewish settlement is widespread, the streets with the largest numbers of Jewish households are concentrated in the district of Red Bank.

Table 3.1 shows a summary table of the data on the Jews of Manchester in 1881. We see that at that time they comprised just over 2% of the total population in the city. We also see that in the district of Red Bank, the Jews were a much higher proportion, almost a third of the total population of the district. All the other districts of Manchester had much smaller concentrations of Jewish population (Broughton - 436, the remaining district of Cheetham - Strangeways and Cheetham Hill - 790, Chorlton - 672, Central Manchester - 790, Moss Side - 324, Salford - 46). This suggests that the area of initial settlement was still the core of Jewish settlement in 1881. This is confirmed by plate 16 which shows that the largest numbers were concentrated in the Red Bank district (with the warmest colours) and Chorlton, in the south-east contains streets with very low numbers of Jews. The latter result is probably a factor of the much lower densities of population in Chorlton overall, due to its upper-middle class status. Analysis of relative density below will show a clearer picture of distribution. A different way of looking at the figures is if we consider the top 10 streets with Jewish population (if we sort by total number of Jews per street and take those with the 10 highest numbers); of these, 8 are in Cheetham and contain 2175 Jews, which constitute 32% of the Jewish population in Manchester in 1881.

Table 3: Summary of 'Ethnic' Data, Manchester		
3.1 Data on Jewish population numbers ³⁷	COUNT	PERCENT
Total number of Jews in Manchester	7745	-
Total population in Manchester ³⁸ :	341414	-
Percentage of Jews from population in Manchester:		2.3%
Total number of Jews in Red Bank:	3115	-
Total population in Red Bank:	9578	-
Percentage of Jews in Red Bank from population of Manchester:		0.9%
Percentage of Jews from population of Red Bank:		32.5%

Table 3.2 analyses the 'foreignness' of the Jewish population of Manchester, by breaking down the proportion of Jews born abroad by country of origin. We see that over half the Jewish population is born in Britain, with the majority born in the Manchester area. We see that of the Jews born abroad, the largest proportion were born in Eastern Europe³⁹ with the next largest born in Western Europe⁴⁰. We also see that the mean age of Jewish heads of household is 41, and that of all Jews, 22.

Table 3: Summary of 'Ethnic' Data, Manchester		
3.2 Data on length of time in district - country of origin and age ⁴¹	COUNT	PERCENT
Sum Jews born in Manchester area (percentage of total):	2979	(43.2%)
Sum Jews born in Great Britain, but not Manchester area (% of total):	891	(12.9%)
Sum Jews born in Ireland (% of total):	32	(0.5%)
Sum Jews born in Western Europe (% of total):	878	(12.8%)
Sum Jews born in Eastern Europe (% of total):	1933	(28.1%)
Sum Jews born in Asia (% of total):	82	(1.2%)
Sum Jews born in Africa (% of total):	22	(0.3%)
Sum Jews born in Americas (% of total):	22	(0.3%)
Sum Jews born in Australia (% of total):	5	(0.1%)
Sum Jews where no birthplace was given:	39	(0.6%)
Mean age of Jews in 1881:	22 years	-
Mean age of Jewish heads of household in 1881:	41 years	-

Table 3.3, below shows that a significantly larger proportion of Jews than their non-Jewish neighbours, are foreign born. This difference is maintained within the high-density district of Red Bank⁴². This table also shows the results of calculating the mean age of the eldest child born in Britain, taken only for households where at least one head or wife was born abroad. This figure is an indication of the length of time that a family has been living in Britain (the higher the age, the longer they are likely to have been living in Britain) and is a more precise indication of 'foreignness' than the fact that a head or wife were born abroad, since it indicates the minimum time the family in question had been in the country. We see that both for Manchester overall, and for Red Bank, foreign-born Jewish households have been in the country at least 3 years less than their non-Jewish counterparts, on average. This is confirmed by the t-tests. We also see that the Jewish households in Red Bank had a lower age than that for all Jewish households, on average (although this was not statistically significant).

³⁷ The statistics here were summarised directly from the computer file on Jewish individuals created from Williams' written lists.

³⁸ This figure is from Her Majesty's Government (1883).

³⁹ The following census entries of 'place of birth' were categorised as Eastern Europe: Corfu, Cracow, Greece, Hungary, Poland, Romania, Russia, Russian Poland, Poland, Salonica, Vilna, Warsaw.

⁴⁰ The following census entries of 'place of birth' were categorised as Western Europe: Austria, Bavaria, Belgium, Bohemia, Denmark, France, Germany, Gibraltar, Holland, Italy, Malta, Norway, Paris, Prussia, Spain, Spain, Sweden, Switzerland.

⁴¹ The statistics here were summarised from the computer file which summarised data on Jewish households.

⁴² It is interesting to note, that although there were fewer foreign-born heads amongst the non-Jews of Red-Bank, of those heads or wives born abroad, 91% were born in Ireland.

Table 3: Summary of 'Ethnic' Data, Manchester		
3.3 Data on length of time in district - 'foreignness'	MEAN	T-TEST
Mean percentage of Jewish heads born abroad:	82%	p<.0001
Mean percentage of non-Jewish heads born abroad:	14%	
Mean percentage of Jewish heads born abroad, in Red Bank:	83%	p<.0001
Mean percentage of non-Jewish heads born abroad, in Red Bank:	14%	
Mean age of eldest child born in Britain for all Jewish population: ⁴³	10.12	p=.0023
Mean age of eldest child born in Britain for all non-Jewish population:	13.89	
Mean age of eldest child born in Britain for all Jewish pop, Red Bank:	9.81	p=.0302
Mean age of eldest child born in Britain for all non-Jewish, Red Bank:	14.26	

Such a finding is typical of areas of initial settlement for immigrants, where populations tend to be more transient. If we compare the mean age of the eldest child in Red Bank (9.81) with that of all other Jewish streets in Manchester (12.00), we find a more significant finding: p=.0077. This is further confirmation that the Jews living in the area of high-density were more 'foreign' than those residing in the rest of Manchester.

• Ethnic Density Analysis - Manchester

As described earlier, in order to calculate the relative density of Jews to non-Jews and in order to compare Jewish households to non-Jewish households in the same street, data on all inhabitants in streets with Jewish addresses were compiled and summarised per household and per street as follows: Each street in which Jews lived was checked in the original census records provided by the ESRC in order to see how many occupied houses there were in total. In addition, information on the number of inhabitants, occupation of heads, number of servants and lodgers, number of sharing households and other associated data were also compiled. A summary of these data per street was entered into the table of spatial values.

In addition to the summary of data described above, the relative proportion of Jews to non-Jews in each street in the city was calculated. Initially Jewish density was calculated for the number of inhabitants, rather than number of families. The street was generally taken as the unit, except in cases of very long streets, which were treated in sections⁴⁴.

A picture of the result of this calculation, can be seen in plate 17⁴⁵. Plate 17 shows the proportion of total number of Jews from the total number of inhabitants, per street; this is represented in 6 groups. Streets with over 50% Jews are coloured in 3 shades of blue, the darker the colour, the higher the proportion of Jews to non-Jews. The streets with under 50% Jews are coloured in 3 shades of red, the darker the colour the lower the proportion of Jews to non-Jews.

- We see here that despite the impression given in plate 2 in the previous chapter, that Jewish settlement was very widespread in Manchester, these plates illustrate that the largest numbers were concentrated in the Red Bank area and that the highest proportions, besides a couple of streets in the Chorlton and central areas of the city, were also located in the district of Red Bank. It is likely that the high proportions in the latter cases were due to the few number of residences per street in Chorlton and in the central area due to the relative short length of the streets in the area (also leading to fewer addresses).

Plate 18 shows the same picture, but concentrates on the district of Red Bank. Principle Jewish synagogues

⁴³Age eldest child born abroad was always calculated just for households where at least one head was born abroad.

⁴⁴It should be noted that both of these methods follow those used by George Arkell, whose map of Jewish East London in Russell and Lewis (1900) has become an important tool of research into Jewish settlement in late 19th century London. See Russell and Lewis (1900), Notes on Map, p. XXXVI. See also Newman (1985) for description of the map and its compiler.

⁴⁵The methods used to create plates 17 and 18 follow those of George Arkell (see above note).

and the Jewish school are coloured yellow.

- It is evident from plate 18 that the distribution of Jewish settlement is not uniform in Red Bank, rather, we see that streets with highest density are concentrated in the southern and western parts of the district, whilst streets with medium density, coloured light blue and light red tend to be on the main streets or one step off.

Further analysis was undertaken by compiling data on all non-Jewish households in 'Jewish' streets. In addition to this, as explained in section 3.1 above, data were compiled on all streets in Red Bank which did not have Jewish households at all; this enabled a complete cohort analysis of the area and was done in order to eliminate any possible inaccuracies leading from only looking at 'Jewish' streets. A check on the accuracy of the definition of the geographical area of Red Bank was possible once data had been compiled, by comparing the mean density in Red Bank as compared with mean density in all Manchester (density was defined as the number of Jewish inhabitants in a street as a proportion of the total number of inhabitants in a street, since Jewish households tended to be larger than non-Jewish), as follows:

Table 3: Summary of 'Ethnic' Data, Manchester		
3.4 Density (proportion of Jewish to non-Jewish inhabitants) for Red Bank district and city overall		
mean density for all Jews in Manchester:	20.121%	
mean density for all Jews, not in Red Bank:	15.390%	t-test comparing with all: p=.0009
mean density for all Jews, in Red Bank only:	43.667%	t-test comparing with all: p<.0001

We see in the table above that the average inhabitant density in the Red Bank area is significantly higher than average; whilst that in all other 'Jewish' streets is significantly lower than average. This confirms the geographical definition of the district of Red Bank as being high density Jewish.

Despite the fact that the analysis shown so far measures density by inhabitants (where the proportion of Jewish inhabitants was measured per street) a check was made on this by calculating density by households (where the proportion of Jewish *households* was measured per street). Table 4 summarises the data on Jewish household density per street. We see in table 4 that according to this measure, household density is 18% for all Manchester, rising to 40% for Red Bank, as compared with 20 and 44 if we repeat the figures from table 3.4. Although the results are

marginally different, we see that the difference between the two areas is maintained, with almost twice the rate in the Red Bank area, than for all Manchester.

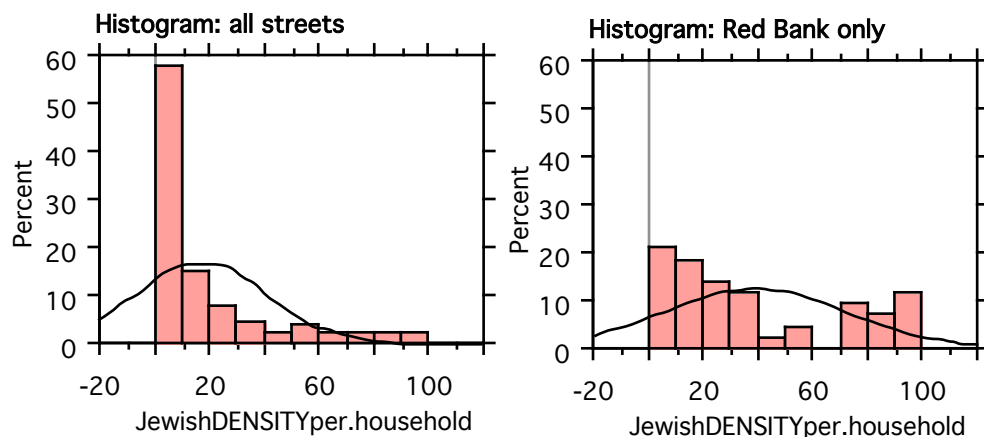
Table 4: Summary of Jewish Population Density, Manchester⁴⁶	
Mean percentage of Jewish to all houses in a street:	18%
Mean percentage of Jewish to all houses in a street in Red Bank:	40%
Mean percentage of Jewish inhabitants to all inhabitants in a street:	20%
Mean percentage of Jewish inhabitants to all inhabitants in Red Bank:	44%

Although density was calculated per inhabitant for the maps, in order to replicate the Russell and Lewis map of London, for the purposes of statistical analysis in this and subsequent chapters, density was calculated per household, so that households where Jews were boarding with non-Jewish families could be easily eliminated from the density calculation (since there were many cases of streets where only sole lodgers resided)⁴⁷.

• Spatial and Density Data Analysis - Manchester

In order to analyse the relationship between spatial distribution and Jewish density, the frequency distribution of density was calculated for 10 bands between 0-100%. Households where Jews were boarding with non-Jewish families were excluded. In diagram *a* below we see histograms of the distribution - on the left for all streets in Manchester and on the right, for streets in Red Bank only (graphs were created at the same scale). We can see that for Manchester overall there was a predominance of cases where density was under 10%; whereas in Red Bank, the spread of density was much more even and there were more cases in the upper three bands, where density was higher than in all streets.

c Frequency distribution of Jewish density per household: for all streets, for Red Bank only.



The next stage of the analysis was to summarise the spatial and social values per density band, in order to conduct regression analysis. Again analysis was done only of the households within the Red Bank area.

Analysis was undertaken to see if there was a relationship between the various spatial measures and density. Following is a series of bivariate scattergrams which plot the mean spatial values for each density band against the mean household density for Jews per street⁴⁸. The *x* axis in each scattergram shows mean density per street (not including households with sole lodgers) and the *y* axis shows the mean spatial values for each density band.

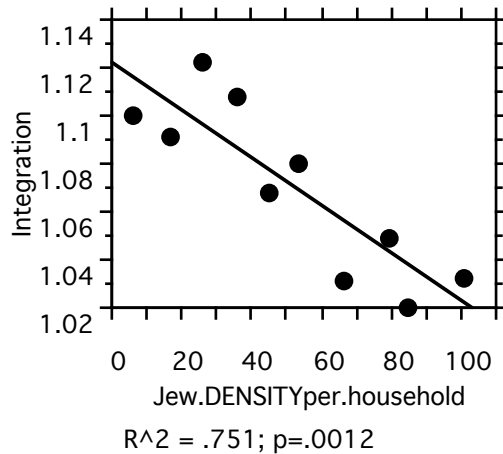
⁴⁶ The statistics in this table are from a computer file which averaged Jewish and non-Jewish households per street.

⁴⁷ Households where Jews were boarding with non-Jewish families are referred to from now on in this analysis as 'sole lodgers'

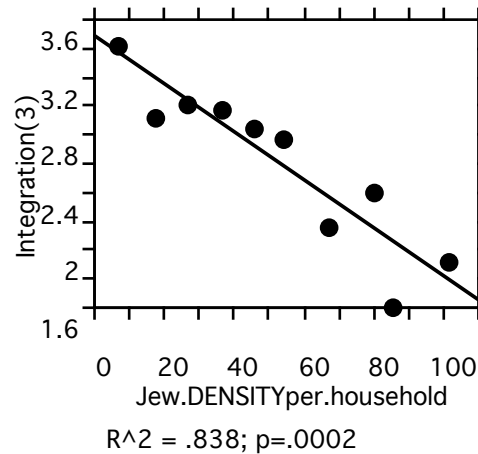
⁴⁸ The scattergrams are derived from a file which summarised spatial data per 10 density bands. Before calculating density of the proportion of Jewish to non-Jewish households, the sole lodgers were subtracted from the total number of Jewish households in each street.

The scattergrams for global integration and local integration see *d* and *e* below, indicate a strong reverse correspondence between density and spatial measures. These suggest that the higher the density of Jewish settlement, the lower the spatial integration of the street in which they live.

d. Scattergram of Jewish density per household vs. radius n integration

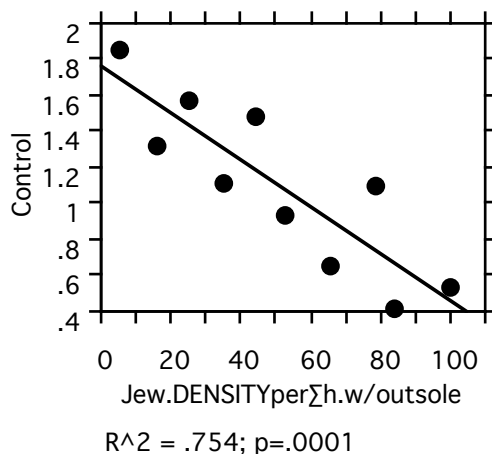


e. Scattergram of Jewish density per household vs. radius 3 integration

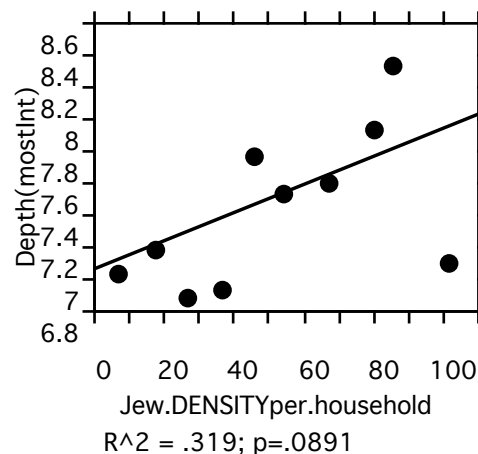


The scattergram in *f* below suggests that the relationships shown above are maintained for the measure of control. The scattergram *g* below shows the relationship between density bands and depth from the most globally integrated street in Manchester (whereby the higher the depth value, the higher the distance from the point of origin). Here the correspondence is not maintained, but it is evident that the biggest outlier is the depth value for the top band (point on the right). If this band is removed from the analysis, the R^2 value rises to .751, $p=.0008$. In other words, there is a strong correspondence between distance from the global integration core and higher density, except for the top band, which is relatively close to the core.

f. Scattergram of Jewish density per household vs. control



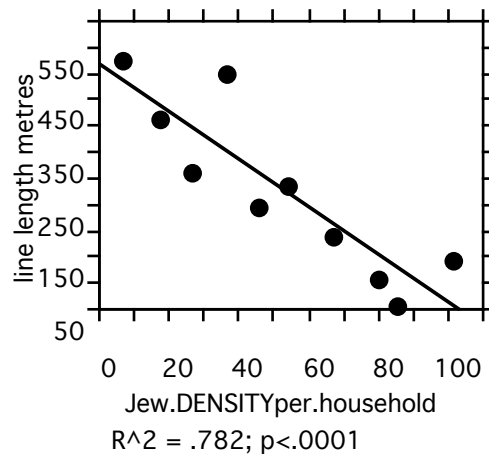
g. Scattergram of Jewish density per household vs. depth rad n integration core



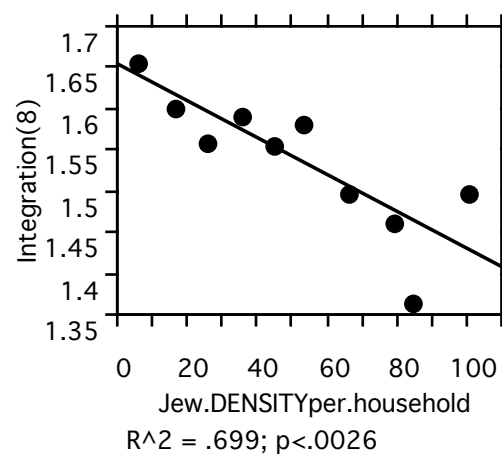
Lastly, a correspondence was found for the scattergram between axial line length and density, as can be seen below in *h*. This suggests that the shorter the street, the higher the proportion of Jews to non-Jews. The scattergram for density vs. integration radius 8, in *i* below, also shows an interesting result. It was suggested above, when weighting for the number of Jewish households in a street, that Jewish households within Red Bank tend to have higher than average radius 8 integration when compared with non-Jewish households; this was a reversal of the findings for radius 3 and radius n integration. The scattergram below suggests a reason for this - we see that overall there is a lower correspondence between density and integration radius 8 than for radius n and 3 in figures *d* and *e* above, yet closer examination of the scattergram suggests that this is due to a lack of correspondence for the top two bands of density and that the remaining bands have a

higher rate of correspondence for radius 8 than they do for radius 3 and n. In other words, the pattern of higher density corresponding to lower integration holds for radius 3 and radius n for all bands, but in the case of radius 8 holds only for the bottom 8 bands, whilst the top two bands of density do not correspond (90% density is less integrated than expected and 100% density is more integrated than expected). In other words, the tendency towards higher than average radius 8 integration may be a consequence of the top band for density over-performing.

h Scattergram of Jewish density per household vs. axial line length



i. Scattergram of Jewish density per household vs. radius 8 integration



The results of these scattergrams help explain the results found above, which suggested that Jewish households tended to live in less integrated streets than non-Jewish households, since the scattergrams between density and integration suggest that where there were relatively more Jewish households, these tended to be located in more segregated streets.

4.2. Spatial and Ethnic Analysis - Leeds

• Ethnic Analysis - Leeds

A similar compilation to that described above for Manchester took place for the Leeds data, whereby contextual data on the Jews of Leeds were compiled by obtaining data on all households in streets which contained Jewish households. Plate 19 shows a representation of Jewish settlement in Leeds according to the total number of Jews in each street in which they resided, coloured up in bands from blue to red. It should be noted that the scale of plate 19 differs from that in plate 16, which showed sum inhabitants per street in Manchester; whereas in Manchester the number of inhabitants per street ranged up to 432, in Leeds the largest number of Jewish inhabitants in a street was 286. Therefore the streets coloured red in plate 16 represent higher numbers than in plate 19. This illustration indicates that the streets with the largest numbers of Jews were located within the Leylands area (coloured grey).

Table 5.1 shows a summary of the data on the Jews in Leeds in 1881. We see that they comprised less than 1% of the total population of Leeds, a smaller proportion than that for Manchester (2%). We also see that in the district of Leylands, the Jews were a much higher proportion, almost 30% of the population of the district - this is a similar proportion to that of the equivalent district in Manchester (32.5%). We also see that most of the Jews in Leeds resided in Leylands (2371 of the total of 2937).

Table 5: Summary of 'Ethnic' Data, Leeds		
5.1 Data on Jewish population numbers ⁴⁹	COUNT	PERCENT
Total number of Jews in Leeds:	2937	-
Total population in Leeds ⁵⁰ :	309119	-
Percentage of Jews from population in Leeds:		0.95%
Total number of Jews in Leylands (according to Freedman records):	2371	-
Total population in Leylands:	8515	-
Percentage of Jews in Leylands from population of Leeds:		2.8%
Percentage of Jews in Leylands from population of Leylands:		27.8%

Table 5.2 analyses the 'foreignness' of the Jewish population of Leeds in a similar manner to that for Manchester. We see that 45% of Jews were born in Britain - this is a 10% less than Manchester (56.1%) - another indication that this is a relatively new settlement. As in Manchester, the greatest proportion were born in Eastern Europe and the next largest group in Western Europe, but the proportion for Eastern Europe, 47%, is considerably greater than in Manchester (28%) and is indeed the largest group overall if we also consider British born Jews.

Table 5: Summary of 'Ethnic' Data, Leeds		
5.2 Data on length of time in district - country of origin and age ⁵¹	COUNT	PERCENT
Sum Jews born in Leeds area:	1086	37.2%
Sum Jews born in Great Britain, but not Leeds area:	238	8.1%
Sum Jews born in Ireland:	2	.1%
Sum Jews born in West Europe:	216	7.4%
Sum Jews born in East Europe:	1372	46.9%
Sum Jews born in Asia:	2	.1%
Sum Jews born in Africa:	2	.1%
Sum Jews born in Americas:	5	.2%
Sum Jews born in Australia:	0	-
Sum Jews where no birthplace was given:	5	.2%
mean age of Jews in 1881:	19 years	-
mean age of Jewish heads of household in 1881:	33 years	-

The mean age of Jewish heads and Jews overall is lower than in Manchester, especially in the case of Jewish heads, 33 years, as compared with 41 years in Manchester. The lower age for heads may be an indicator of a higher number of sole immigrant Jews in the Leeds group.

Table 5.3 (below) shows that a considerably higher proportion of Jews than non-Jews were born abroad. This is especially the case in Leylands, where 95% of Jewish heads were born abroad. These proportions are higher than in Manchester, where both within the Red Bank district and overall, the proportion of foreign-born heads stayed at around 82%; whilst non-Jews born abroad are at a similar proportion to Manchester (14%). All of these differences help confirm the assertion made in chapter 4 on the relative youth of Jewish settlement in Leeds as compared with that in Manchester.

⁴⁹ The statistics here were summarised directly from the computer file on Jewish individuals recompiled from Murray Freedman's computer files.

⁵⁰ This figure is from Her Majesty's Government (1883), a summary of the 1881 census for Great Britain.

⁵¹ The statistics here were summarised directly from the computer file on Jewish individuals recompiled from Murray Freedman's computer files.

Table 5: Summary of 'Ethnic' Data, Leeds		
5.3 Data on length of time in district - 'foreignness'	MEAN	T-TEST
Mean percentage of Jewish heads born abroad:	88%	p<.0001
Mean percentage of non-Jewish heads born abroad:	11%	
Mean percentage of Jewish heads born abroad, in Leylands:	95%	p<.0001
Mean percentage of non-Jewish heads born abroad, in Leylands:	15%	
Mean age of eldest child born in Britain for all Jewish population	9.79	p=.0009
Mean age of eldest child born in Britain for all non-Jewish population	12.23	
Mean age of eldest child born in Britain for all Jewish pop, Leylands	6.74	p<.0001
Mean age of eldest child born in Britain for all non-Jewish, Leylands	13.65	

Lastly, table 5.3 looks at the foreignness of Jewish families by studying the age of the eldest child born in Britain. Age eldest child born abroad was always calculated just for households where at least one head was born abroad. Overall, these findings suggest that the Jews of Leeds had been less time in the country than their non-Jewish counterparts. Like in Manchester, the figures for the city overall indicate that the Jews had been in Britain on average, around 3 years less. However, unlike Manchester, there is a much greater difference for the area of Leylands, where the mean age of the eldest child is only 6.7, almost 7 years less than non-Jews, whereas in Manchester the equivalent figure was 9.8, 4 years less than non-Jews. In both cases, the difference between Jews to non-Jews is statistically significant.

• Ethnic Density Analysis - Leeds

Plate 20 shows the proportion of total number of Jews from the total number of inhabitants, per street by colouring up the axial lines in three shades of red for below 50% density and in three shades of blue for above 50% density. The difference between this illustration and plate 19 (which illustrates total numbers of Jews per street) is that we see that there are a couple of streets outside of the Leylands area which contain high density settlement, but most of the streets in which Jews are a majority (coloured blue) are concentrated in the Leylands area. Plate 21 shows the same values as 20, but concentrates on the Leylands area and here colours up the residential buildings of a map of the area.

- We see that the highest densities (the darkest blues) are concentrated in the south-eastern sector of Leylands.
- We also see that blue streets - streets in which Jews were a majority - tend to be those located one step off Regent Street, the most locally integrated street in the area and two steps off Hope Street, the most globally integrated street in the area.
- We also see that dark red streets, where the Jews are less than 5% of the population of a street, are almost wholly outside of the Leylands area and only on the main streets surrounding it.

Table 6 summarises the data on Jewish population per street in Leeds and within Leylands.

Table 6: Summary of 'Ethnic' Data, Leeds
--

Data on Jewish population density ⁵²	
Mean percentage of Jewish to all houses in a street:	22%
Mean percentage of Jewish to all houses in a street in Leylands:	32%
Mean percentage of Jewish inhabitants to all inhabitants in a street:	26%
Mean percentage of Jewish inhabitants to all inhabitants in Leylands:	38%

We see that the average density, when considering Jewish households, is 22%, rising to 32% within Leylands. These densities are lower than in Manchester (18% and 40%, respectively). The density per number of Jewish inhabitants in a street is higher: 26% and 38%, and is probably a factor of the larger size of Jewish households.

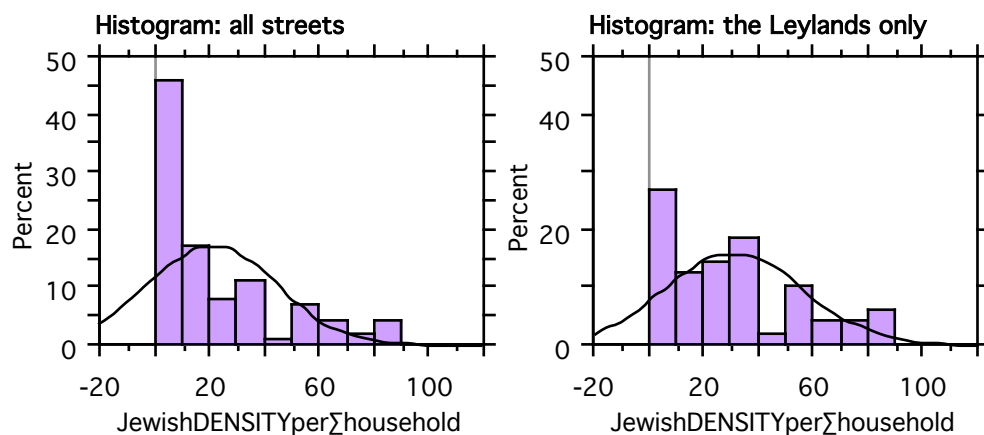
From this point, all density was calculated per household, rather than per inhabitant, in order to eliminate streets which only contained sole lodgers.

• Ethnic and Density Data Analysis - Leeds

The frequency distribution of density was calculated for 10 bands between 0≥100% (without Jewish households where the Jews were sole lodgers).

In figure *j* below we see a pair of histograms (at the same scale) showing the distribution of density within Leeds overall and within the Leylands only. As in Manchester, the distribution for the city overall shows a predominance in the bottom band of 0>10%, although in Leeds only 43% of streets have a bottom rate of density. We also see that there are not any cases within the top band of density. This distribution is maintained for the Leylands alone, with a big decrease in the bottom band - in other words, most of the lowest density streets are outside of the Leylands.

j. Frequency distribution of Jewish density per household: for all streets, for Leylands only.



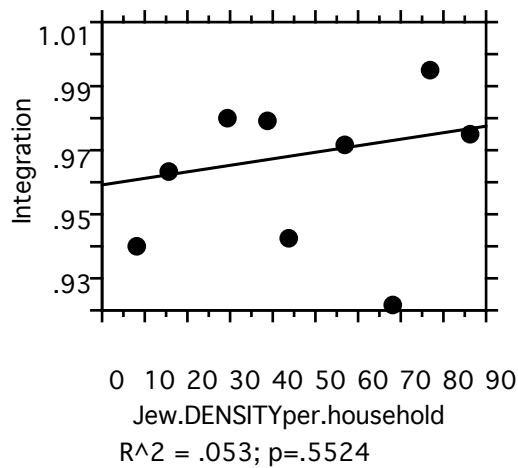
The next stage of the analysis was to summarise the spatial and social values per density band, in order to conduct regression analysis. Following is series of bivariate scattergrams which plot the mean spatial values for each density band against the density band number⁵³. The x axis in each scattergram shows mean household density per street (not including households with sole lodgers) broken into 10 bands and the y axis shows the mean spatial values for each band.

The scattergrams *k* and *l* below suggest that there is no correspondence between global integration and density (unlike Manchester, where the R^2 value was .756). In the case of local integration, like Manchester, we see a strong reverse correspondence between local integration and density - the higher the density, the lower the rate of local integration.

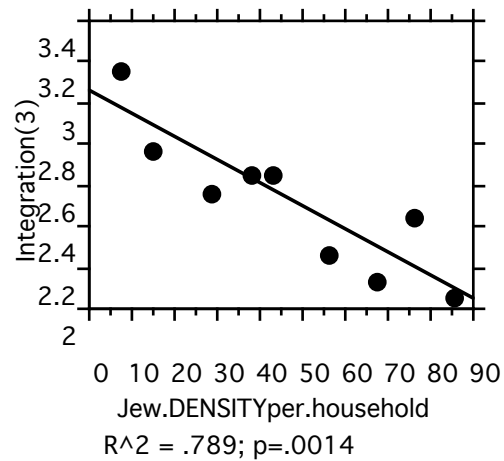
⁵² The statistics in this table are from a computer file which summarises data on Jewish and non-Jewish households, per street.

⁵³ The scattergrams are derived from a file which summarised spatial data per 10 density bands.

k Scattergram of Jewish density per household vs. radius *n* integration

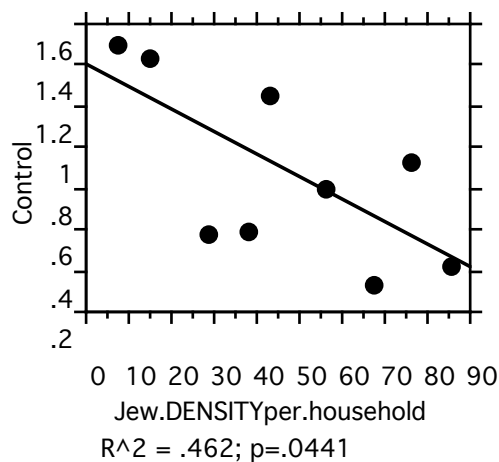


l Scattergram of Jewish density per household vs. radius 3 integration

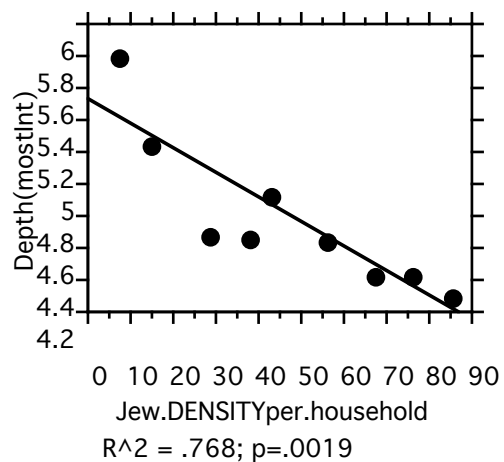


The scattergrams, *m* and *n* below, show the correspondence between control and density and depth from the global core and density. In the first case we see again that there is no correspondence between the two measures. However, we see a strong correspondence in figure *n*. What we see here is that despite the fact that patterns of density distribution do not seem to correspond to the pattern of global integration (as seen in *k* above), when considering axial distance we see that the higher the density of Jews to non-Jews, the closer the streets are to the global integration core.

m Scattergram of Jewish density per household vs. control



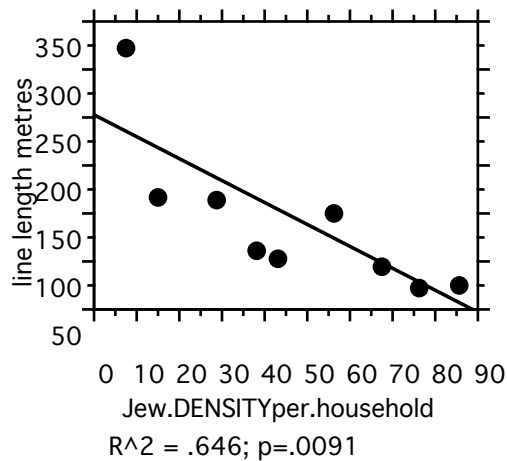
n Scattergram of Jewish density per household vs. depth rad *n* integration core



Lastly, a correspondence was found, as in Manchester, between axial line length and density, as can be seen in scattergram *o* below; although the bottom band of density is evidently located on streets which are especially long. This confirms the point noted regarding plate 20, that the under 5% density tended to be located on the main streets surrounding the Leylands and on the (longer) streets outside the area. Overall, this result suggests that higher density corresponds with shorter streets.

o Scattergram of Jewish density per household vs.

axial line length



The analysis of the Leeds results has suggested that the pattern of density distribution in Leeds was very similar to that in Manchester and strengthens the findings that when Jewish households are located in high densities, they tend to live in less integrated streets than non-Jewish households.

5. Summary and Discussion

The main purpose of this chapter was to investigate whether minority clustering tends to correspond with spatial segregation. The answer to this question has turned out to be complex:

Through analysing the wide-spread settlement of the Jews of Manchester, it was possible to conclude that the Red Bank area was relatively spatially segregated from other areas of the city - a factor that confirms the perception of high-density clustering being associated with 'ghetto-like' settlement. On the other hand, it was also evident that Jewish streets in areas of secondary settlement had higher than average rates of spatial integration - suggesting that once they had left the Red Bank area, although they clustered, the Jews were located in relatively well distributed and connected streets in the city. When 'Jewish' streets in Leeds were compared with the model as a whole, they were also found to be significantly more integrated than average, although the number of cases was small. By analysing the settlement of the Jews in Manchester and Leeds and comparing their spatial attributes with those of the city in general, this chapter has shown that a clear spatial distinction can be made between the settlement in Red Bank and Leylands - normally areas of primary immigrant settlement; and the other areas of settlement in each of the cities - which were generally areas of secondary settlement for the Jews. This was especially the case for Manchester, which had a more established secondary settlement in the period studied here.

Comparisons between Jewish and non-Jewish households led to several conclusions: analysis of the length of time in the district showed that the foreign-born Jews were relatively new to the district when compared with other foreign-born people, suggesting that Jews were the predominant immigrant group in the districts considered 'ghettos' in each of the cities. Analysis of various parameters of 'foreignness' added to this finding, proposing that since the Jews tended to have been living in Britain for shorter periods of time than their non-Jewish neighbours, especially in the areas of Red Bank and Leylands, that the neighbours of the Jews in the Red Bank and Leylands districts of Manchester and Leeds were not on the whole fellow immigrants, but more long-standing residents of the district.

Analysis of Jewish density showed that the area in each city which was perceived as the 'ghetto' contained

double the density than in other streets settled by Jews and that it contained most of the streets where Jewish population was in the majority. So it was safe to conclude that Red Bank and Leylands were indeed the predominant Jewish districts of each of the cities. Despite the fact that the areas of high-density - Red Bank and Leylands - were relatively spatially isolated (even in Leeds, where the high-density area was physically quite close to the global integration core), they were found to have reasonable R^2 values for intelligibility - an indication that the streets in which Jews lived had good local to global links and other spatial parameters suggested that streets in which Jews lived tended to be more integrated than average. On the other hand, when isolating the districts of Red Bank and Leylands and comparing households within the districts, it was found that Jewish households had lower rates of spatial integration, but higher proximity to the main integrators. This finding was explained by analysing the relationship between spatial segregation and relative density, which suggested that streets with higher densities of Jewish households tended to correspond with lower rates of integration and shorter streets. The only exception to this finding was proximity to the global integration core, which showed that higher densities were closer than average to the core. These findings suggest: that streets of secondary Jewish settlement (outside the high density areas) were more spatially integrated than average; and that the denser the settlement, the less integrated the streets. Moreover, this suggests that high density Jewish streets tended to be relatively close to the main streets in the area. The apparent contradiction of low integration occurring with high proximity to main streets, could be explained by the fact that streets with high density tended to be shorter than average (length is also linked to integration) - this suggests that the pattern of settlement was high density in short streets one to two axial steps from the main integrators in the districts. This seems to follow the Hillier and Penn (1993) theory of 'two-step logic' typical of traditional cities (see chapter 2), whereby the local structure is only a few steps away from the main street structure, thus two sets of encounters take place, one at the large scale of the city and another at the level of the more local areas⁵⁴.

Two key findings in this chapter led to further analysis:

- The findings on the 'foreignness' of the Red Bank and Leylands districts suggest that the districts considered the 'ghetto' in each of the cities and identified by its minority inhabitants, actually contained large numbers of British born people. It therefore raises the question of whether the so-called ghetto district was unusual not only because of its large number of foreign (in this case Jewish) inhabitants but possibly also that its British-born inhabitants were different in some way from the rest of the population of the city. This question will be analysed in chapter 6 by comparing the household structure of both Jewish and non-Jewish inhabitants to that of the city overall.
- The findings on the relationship between ethnic density and spatial integration resemble those in a similar study of the Jews of London, where it was suggested that an economic factor was involved in street length; that poorer Jews lived in higher densities in less well integrated streets, which tend as a rule to be shorter⁵⁵. In order to see whether economic factors may also relate to the spatial pattern of the high density districts, chapter 6 will look at the relationship between social class and spatial integration.

⁵⁴ Hillier, Penn et al, (1993), p. 35.

⁵⁵ See Vaughan (1994).

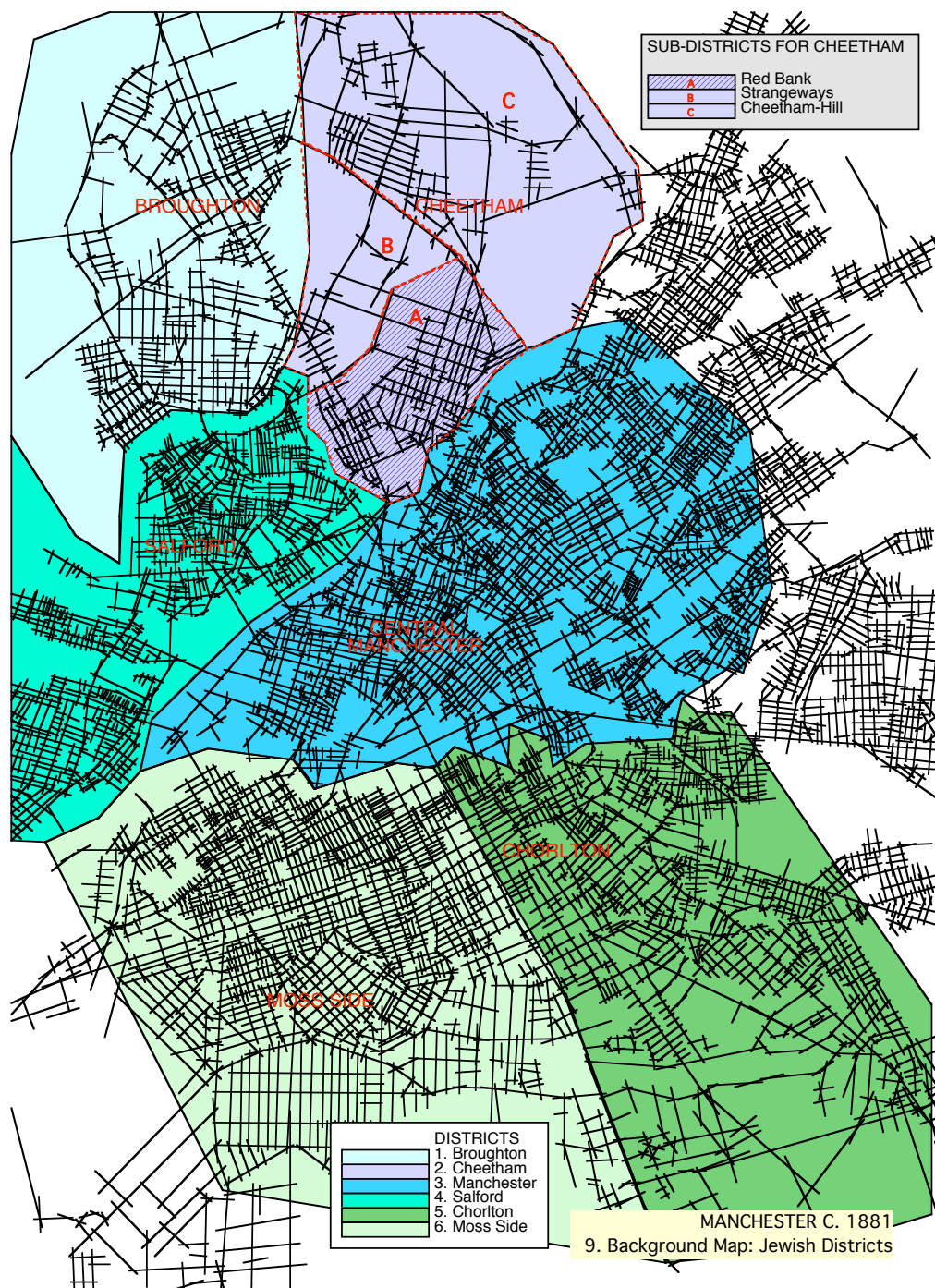


Plate 9: Manchester - Districts of Manchester



Plate 10: Manchester - Global Integration



Plate 11: Manchester - Local Integration



Plate 12: Manchester - Radius-Radius (8) Integration



Plate 13: Leeds - Global Integration



Plate 14: Leeds - Local Integration



Plate 15: Leeds - Radius-Radius (10) Integration

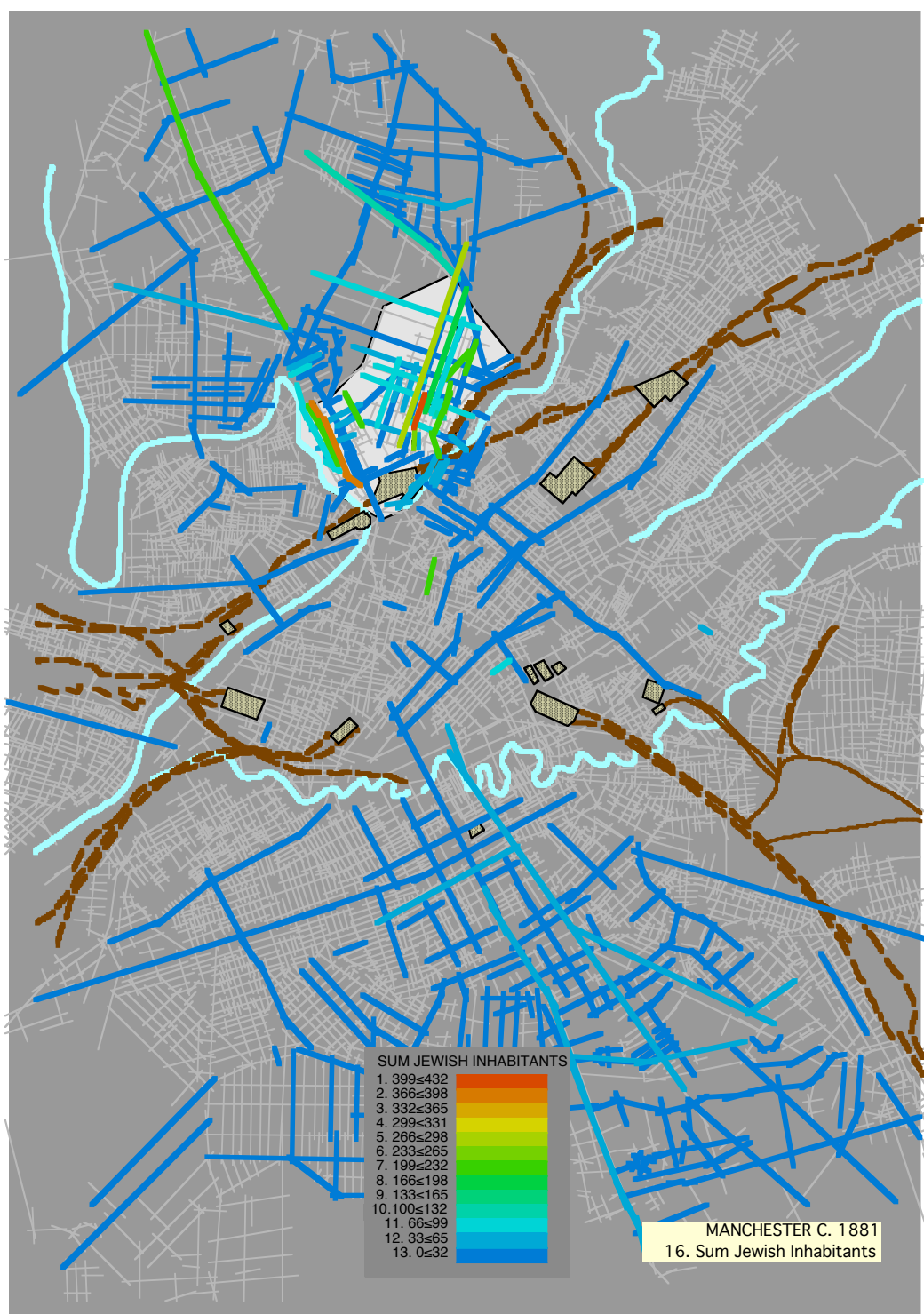


Plate 16: Manchester - Sum Inhabitants per Street.

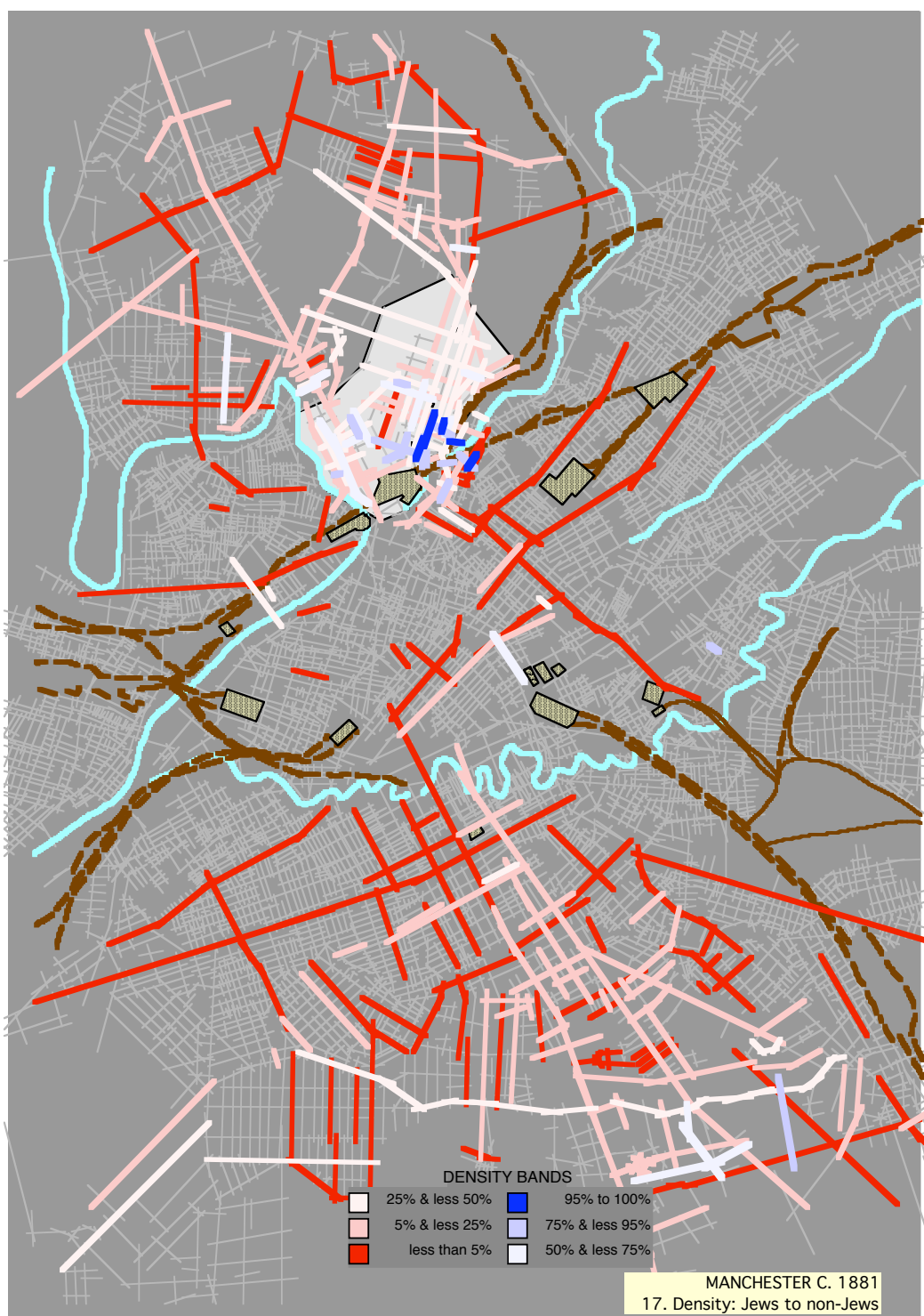


Plate 17: Manchester - Density Jews to non-Jews.

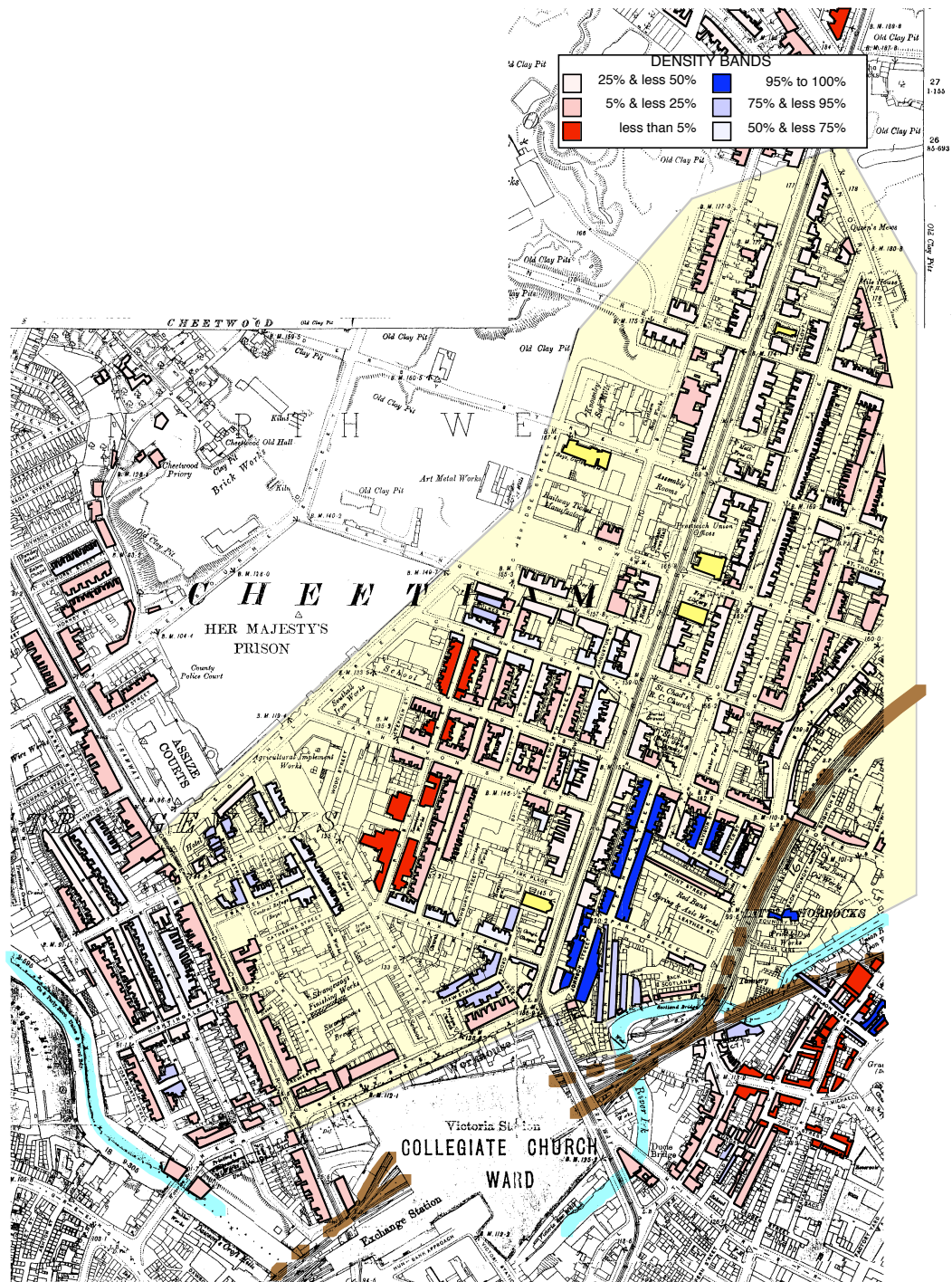


Plate 18: Manchester - Density Jews to non-Jews, 'Red-Bank' Area..

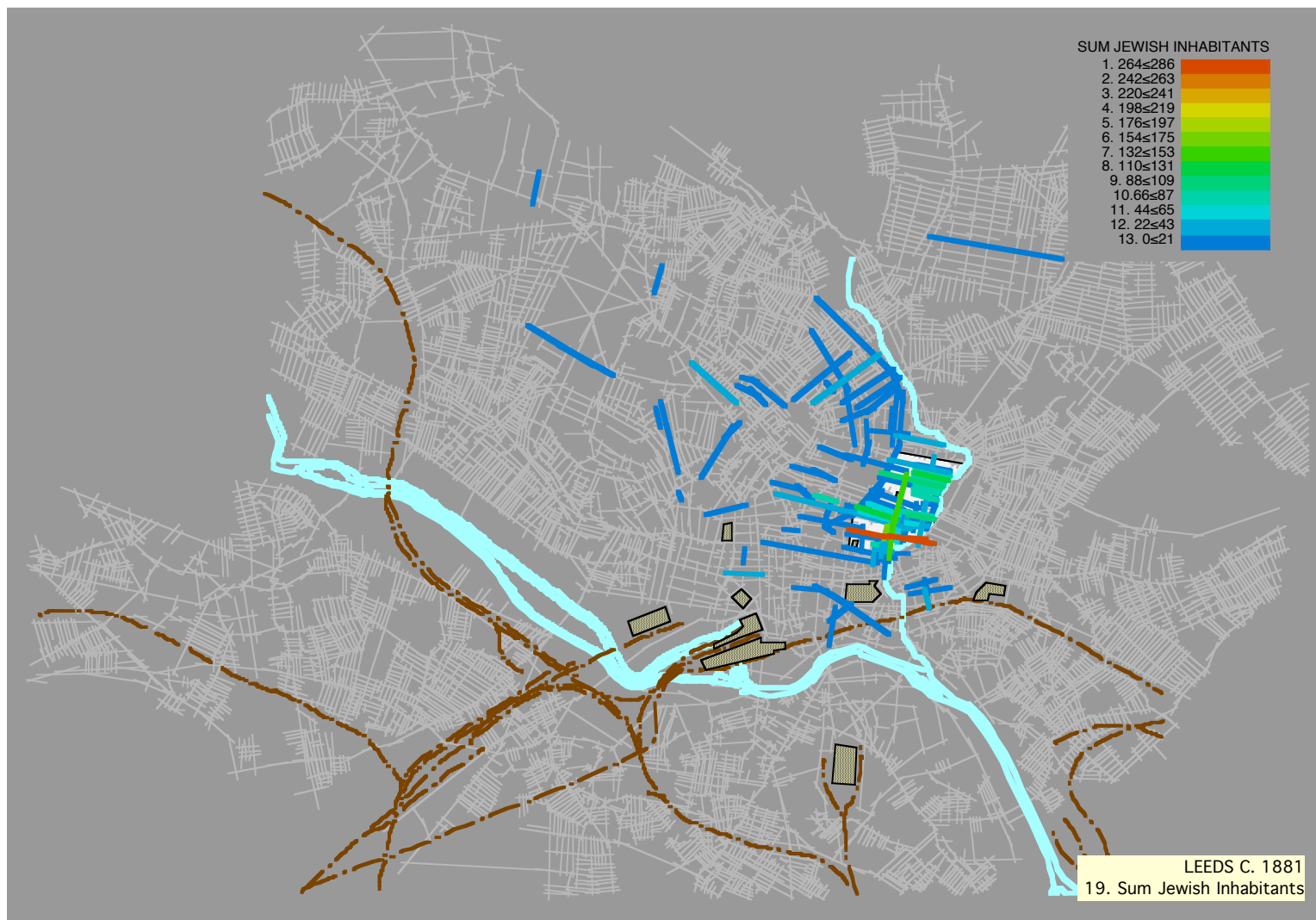


Plate 19: Leeds - Sum Inhabitants per Street.

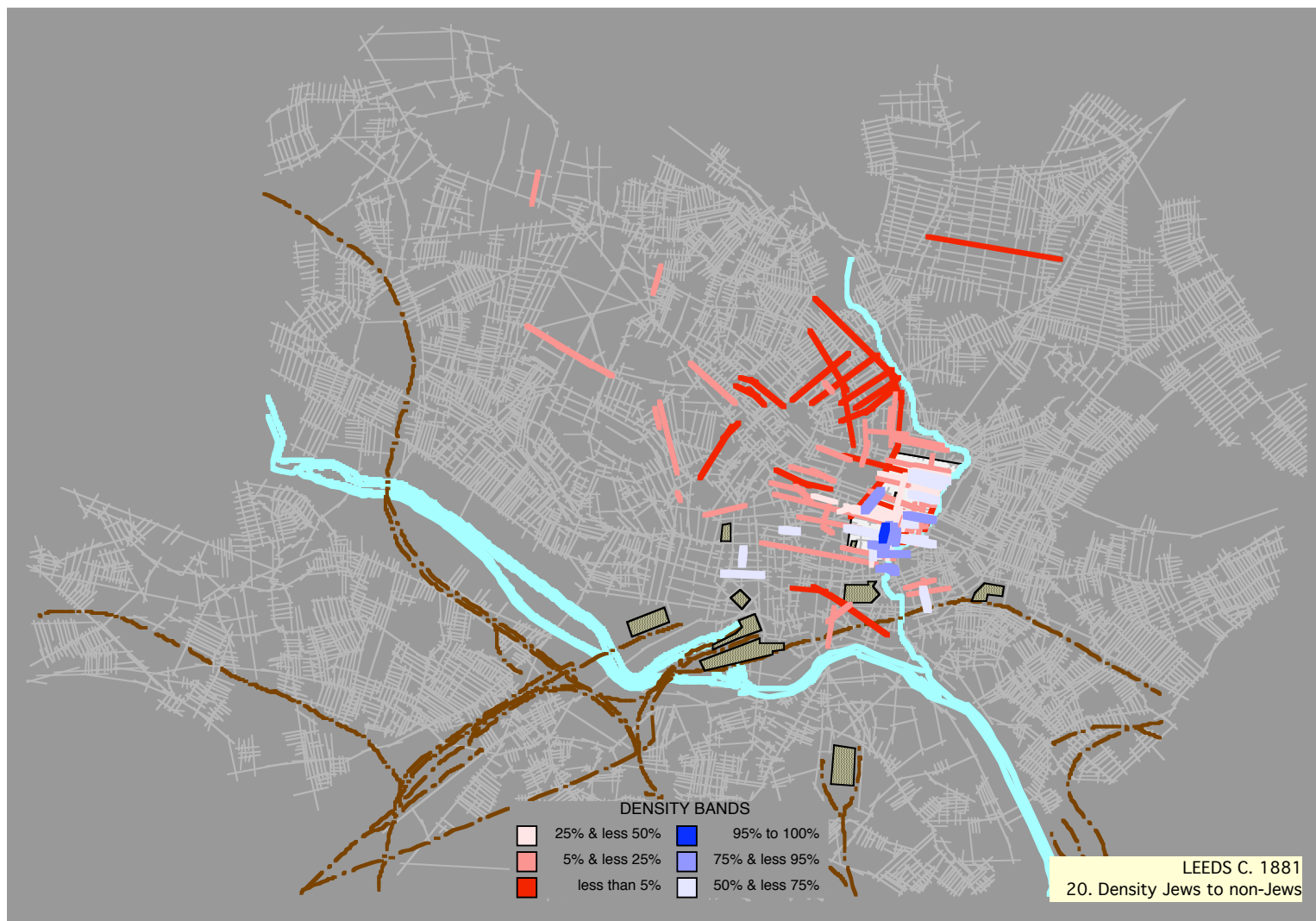


Plate 20: Leeds - Density Jews to non-Jews.

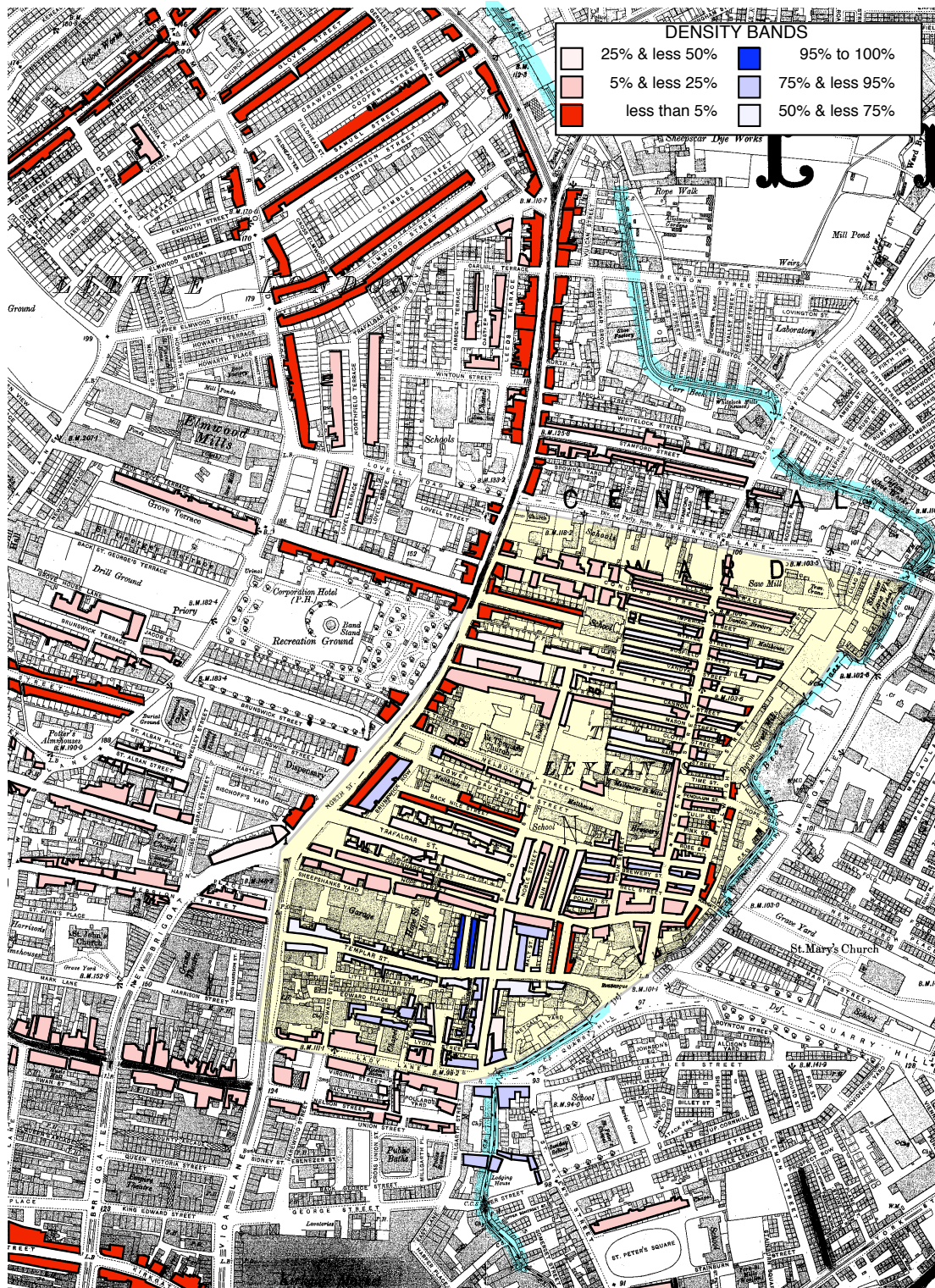


Plate 21: Leeds - Density Jews to non-Jews, 'Leylands' Area.

CHAPTER 6

Analysis of Spatial and Social Structure: Manchester and Leeds 1881

1. Introduction

This chapter continues the analysis presented in chapter 5 and also deals with data from the 1881 census in Manchester and Leeds. The previous chapter analysed the relationship between spatial integration and minority clusters and found that the districts historically considered ‘ghettos’ had distinctive spatial and ethnic characteristics, amongst which that they were areas in which the Jews settled in relatively high density, that the non-Jews of the area tended to be British-born and that the areas tended to be relatively spatially segregated even though the Jewish households were located in relatively integrated streets, when compared to the city overall. The purpose of this chapter is to investigate whether the high density districts of Manchester and Leeds were also distinctive in their social class and household structures.

The analysis investigates social class and household structure in each of the cities, determining whether there were differences between the Jewish families and their non-Jewish neighbours and also whether there were differences between the populations of the high density districts and the populations of the city overall.

This chapter takes its definitions of class from various data in the census: first, data on the occupations of the individual heads or sole Jewish boarders and lodgers in the 1881 censuses of Manchester and Leeds, which provide information on social class; second, data on the country of origin of heads, wives and boarders which provide information on the degree of co-dependence in households; third, data on the numbers of domestic servants, boarders and the relationship between the two provide further indications of social class.

Occupation is the primary source of class classification in this chapter. As noted by Armstrong¹, occupation is the main means of studying social class amongst individuals of the 19th century, since information such as the number of domestic servants or employees is only applicable to a portion of the entire population. In addition, occupation analysis is the most objective criterion of social status, since ‘occupation may be only one variable in a comprehensive theory of class, but it is the variable which includes more, which sets more limits on the other variables, than any other criterion of status.’²

This chapter starts with analysis of social class according to the occupation of the head of household (or Jewish lodger in the case of sole lodgers); the section after that looks at various parameters of household structure: such as household size, co-dependence, number of domestic servants and number of lodgers, to investigate differences between the various population groups; the next section looks at the relationship between social class and Jewish density; and lastly, the relationship between social class parameters and spatial integration is investigated.

¹ Armstrong (1972), pp. 201-2.

² Thernstrom, S.A. ‘Poverty and Progress’; Harvard, 1964, p. 84 quoted in Armstrong (1972), p. 202.

2. Analysis of Social Class as Defined by Occupation

2.1 Social Class Analysis - Manchester

• Distribution of Social Class - Manchester

Table 1.1 below shows the frequency distribution of classes for all Jewish and non-Jewish households in Manchester, displayed in percentages. Figure *a* is a pair of pie-charts displaying the distribution of the two groups. We see that class III comes out the largest in both Jewish and non-Jewish households, with over 80% of heads falling into this class. It is not unusual to find that class III comes out the largest and this is due to the manner in which Armstrong's system classifies occupation, as was explained in chapter 3³. However, a difference is apparent in the distribution of lower and upper classes for the two groups: on the one hand, both Jews and non-Jews have around 11% in the top pair of classes, but on the other hand, only 3% of Jews appear in the lower pair of classes, as compared with 9% of non-Jews.

Table 1: Class Distribution for all Heads of Household		
1.1 All 'Jewish' Streets in Manchester		
	Jewish Percentages (n=1041)	non-Jewish Percentages (n=10354)
I Professional	3	4
II Intermediate	8	6
III Skilled	87	80
IV Partly Skilled	2	5
V Unskilled	1	4

Figure *a*: frequency distribution of class defined by occupation for all heads of household in Manchester, split by Jewish, non-Jewish households.

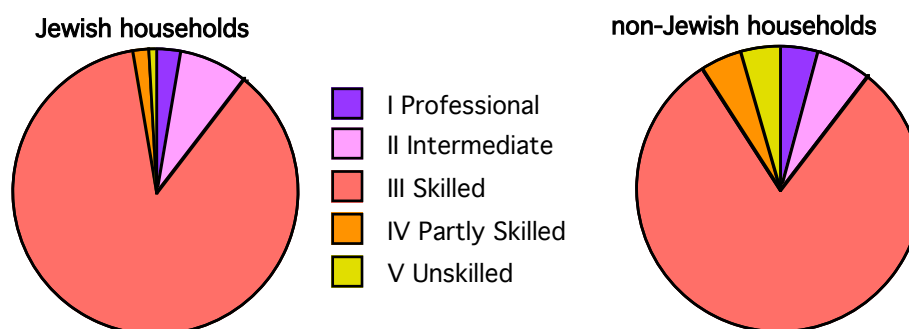
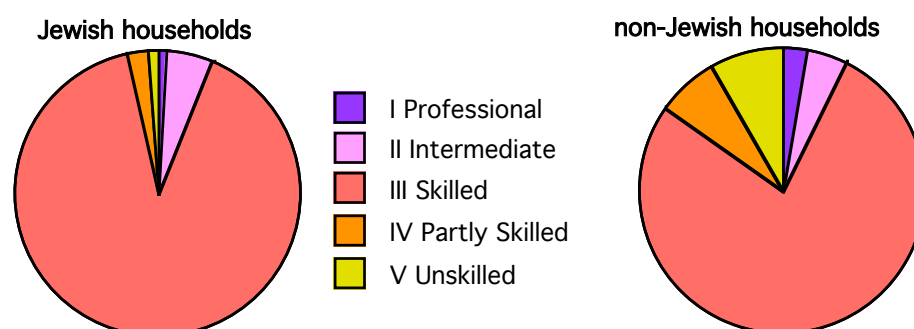


Table 1.2 and figure *b* show the table and pie chart of class distribution for the Red Bank district only. We see that the proportion of heads in the top two classes is reduced equally in both cases to around 7%. However, the disparity between the two groups for the bottom two classes has increased - with only 3% of Jewish heads in classes IV and V; whilst 15% of non-Jewish heads are in those two classes.

Table 1: Class Distribution for all Heads of Household		
1.2 All Streets in Red Bank		
	Jewish Percentages (n=413)	non-Jewish Percentages (n=1080)
I Professional	1	3
II Intermediate	5	4
III Skilled	90	78
IV Partly Skilled	2	7
V Unskilled	1	8

³See: section 3.2, Definition of Social Class.

Figure b: frequency distribution of class defined by occupation for all heads of household in Red Bank split by Jewish, non-Jewish households.



• Analysis of Social Rank - Manchester

Table 2 summarises data on social rank. In order to make the social classes comparable statistically, classes were assigned numbers, called henceforth 'social rank' (arrived at by assigning the figure 5 to all households defined as class I, 4 to all households defined as class II and so on - so the higher the social ranking, the higher the class). Table 2 indicates that the mean social ranking for Jews and non-Jews is maintained when comparing all streets and streets within Red Bank alone. The table also shows that the social ranking for Jewish heads is significantly higher than that of non-Jews in the city as a whole and in the high-density district alone. It is evident from the section above, that the higher proportion of non-Jews in the bottom two classes is pulling the mean rankings down.

Table 2: Summary Social Data - Manchester Jews, 1881 ⁴ : Comparison of Social Rank		
	COUNT	T-TEST ⁵
μ social rank for Jewish heads of household	3.1	p<.0001
μ social rank for non-Jewish heads of household	2.9	
μ social rank for Jewish heads of household, Red Bank	3.1	p=.0002
μ social rank for non-Jewish heads of household, Red Bank	2.8	

2.2 Social Class Analysis - Leeds

• Distribution of Social Class - Leeds

Table 3 below shows the frequency distribution of classes for all Jewish and non-Jewish households, displayed in percentages, followed by a pair of pie-charts in figure c displaying the distribution of the two groups. As in Manchester, we see that class III comes out the largest in both cases and the proportion of Jews in the lower two classes is half that of non-Jews.

⁴The statistics in this table are from a computer file which summarises data on Jewish and non-Jewish households, per street. The notes to this chapter explain the manner in which statistics were compiled. For a full explanation of this, see appendix on compilation methods.

⁵A t-test is a standard statistical test of probability and works by comparing the mean value of a group with the mean value of the population as a whole, and asking how likely it is that the mean of the smaller sample would have been arrived at by chance. 'p' values of less than 0.05 denote a result which is considered 'highly significant'.

Table 3: Class Distribution for all Heads of Household		
3.1 All 'Jewish' Streets in Leeds		
	Jewish Percentages (n=467)	non-Jewish Percentages (n=2658)
I Professional	1	2
II Intermediate	4	6
III Skilled	90	81
IV Partly Skilled	5	6
V Unskilled	1	5

Figure c: frequency distribution of class defined by occupation for all heads of household in Leeds, split by Jewish, non-Jewish households.



Further analysis was done for the high-density district alone. Here in table 3.2 and figure d we see that the proportions for the Jewish heads are more or less maintained, whilst the bottom two classes for non-Jewish heads have increased further in size when compared with the all Leeds distribution – this finding replicates the differences found above between Jews and non-Jews in Manchester.

Table 3: Class Distribution for all Heads of Household -		
3.2 All Streets in Leylands		
	Jewish Percentages (n=386)	non-Jewish Percentages (n=1256)
I Professional	1	1
II Intermediate	3	4
III Skilled	91	80
IV Partly Skilled	5	7
V Unskilled	0	9

Figure d: frequency distribution of class defined by occupation for all heads of household in Leylands, split by Jewish, non-Jewish households.



• Analysis of Social Rank - Leeds

Table 4 summarises data on social rank. This table indicates that, like in Manchester, the mean ranking for Jews and non-Jews is maintained when comparing all streets and streets within the Leylands alone. In fact, the mean rates for Jews and non-Jews are almost identical in the two cities. The table also shows that the social ranking for Jewish heads is significantly higher than that of non-Jews in the city as a whole and in the high-density district alone.

Table 4: Summary Social Data - Leeds Jews, 1881⁶: Comparison of social rank		
	COUNT	T-TEST
μ social rank for Jewish heads of household	3.1	p<.0001
μ social rank for non-Jewish heads of household	2.8	
μ social rank for Jewish heads of household, Leylands	3.0	p<.0001
μ social rank for non-Jewish heads of household, Leylands	2.7	

In summary, both cities demonstrate a difference in class distribution between Jews and non-Jews in the city overall and within the area of high density. This is especially significant in the high density districts, since here analysis took place of all streets and all households (rather than just streets in which Jews were found to reside). Tests of statistical significance of mean social ranks also show differences between the two groups. These findings seem suggestive of the Red Bank and Leylands districts not only being distinctive due to their Jewish population, but also due to the relative poverty of its non-Jewish population, when compared to that of the Jewish. The next section investigates other definitions of social class and looks at how they relate to social class defined by occupation.

3. Analysis of Social Class as Defined by Household Structure

3.1 Social Class Analysis - Manchester

• Indicators of Co-Dependence - Manchester

This section looks at the data on shared households; first by comparing household size and percentage of sharing and then analysing the question of co-dependence, by seeing to what degree do people in sharing households, and households with boarders or lodgers, come from the same country of origin.

The first indicator is the mean household size of Jewish and non-Jewish households (domestic servants were excluded from the calculation of household size). This is summarised in table 5.1.

Table 5: Summary Social Data - Manchester Jews, 1881		
5.1 Comparison of household size		
	COUNT	T-TEST
mean inhabitants per Jewish household ⁷ :	5.9	p<.0001
mean inhabitants per non-Jewish household:	4.9	
mean inhabitants per Jewish household, Red Bank:	6.7	p<.0001
mean inhabitants per non-Jewish household, Red Bank:	4.9	

We see that the Jewish households are larger in Red Bank than in the district as a whole, on average. This difference is not maintained for non-Jewish households. We also see that both in Manchester overall and in Red Bank alone, Jewish households are consistently and significantly larger than their non-Jewish counterparts. The household size may have been a factor of more children in Jewish households, or could

⁶The statistics in this table are from a computer file which summarises data on Jewish and non-Jewish households, per street.

⁷The figures for mean inhabitants were the total inhabitants per household, less servants and included extended family members.

be due to more lodgers and boarders in Jewish households or a greater number of households with more than one family. (The number of lodgers is more usefully used as an indicator of poverty, as will be seen in the section below).

In order to isolate the cause of this finding, it is further checked in table 5.2, by looking at the breakdown of households sharing dwellings with another identifiable family unit (this method of analysis was used in Armstrong's study of York⁸). This was determined by the listing of more than one 'head' within one address. Households where Jews were boarding with non-Jewish families were excluded (referred to from now on in this chapter as 'sole lodgers'). The accuracy of this classification was dependent on the enumerator listing boarders and lodger families as such and not as head, wife, etc. However, even taking account of the possibility that some sharing households were actually households containing boarding families, the measure of economic need is maintained, since better off families are just as unlikely to have boarders as to share their households.

Table 5: Summary Social Data - Manchester Jews, 1881		
5.2 Comparison of household sharing rates		
	COUNT	T-TEST
μ percentage Jewish households sharing	6.1	insignificant difference
μ percentage non-Jewish households sharing	6.0	
μ percentage Jewish households sharing, Red Bank	10.6	p=.0179
μ percentage non-Jewish households sharing, Red Bank	4.6	

We see that in Manchester overall, the proportion of Jewish households sharing does not differ from their non-Jewish neighbours. However, when we isolate Red Bank, we find a much greater and significant proportion of sharing amongst Jewish households.

In addition, the link between immigrant families and sharing of households was checked by selecting only those streets where at least one Jewish head was born abroad and recalculating the mean household size. It was found that the mean inhabitants per Jewish households rose from 5.9 to 6.6 for all Manchester and was maintained at 6.4 when only Red Bank was selected. This may confirm a relationship between large households and whether a head or wife were born abroad.

Table 6.1 summarises data on the birthplace of Jewish and non-Jewish households. We saw in the previous chapter that the Jews of Red Bank tended to have been in Britain for a shorter length of time than in other districts, and that they also differed in this measure from their non-Jewish neighbours (who tended to be longer-residing immigrants from Ireland, if foreign born). This table now looks at the question of whether, if head or wife are born abroad, their spouse is likely to have come from the same country of origin⁹ (if the spouse was British-born, this was also counted as not being from the same country of origin). This is another indication of co-dependence, and also is a method of testing whether immigrants are more likely to marry people from the same country of origin. We see that close to three-quarters of all Jewish foreign households have a common birthplace for head and wife. This proportion is maintained within the area of high-density. On the other hand, there is a significantly lower proportion amongst foreign-born non-Jews, of whom only around 40% share a common birthplace (and this is despite the fact that the majority of non-Jews born abroad came only from Ireland). In most of the cases where foreign born non-Jews did not marry others from the same country, they married British-born spouses.

Table 6: Summary Social Data - Manchester Jews, 1881: Comparison of birthplace data		
6.1 Comparison of spouse's birthplace of foreign-born head or wife	COUNT	T-TEST
Mean percentage of Jewish heads same birthplace as wife ¹⁰ :	73%	p=.0023
Mean percentage of non-Jewish heads same birthplace as wife:	42%	
Mean percentage of Jewish heads same birthplace as wife, Red Bank:	75%	p=.0018
Mean percentage of non-Jewish heads same birthplace as wife, Red Bank:	43%	

⁸See Armstrong (1972).

⁹The use of this indication was quite stringent; for instance, people from Russia-Poland were not classed as being from the same country as people from 'Russia' or 'Poland'.

¹⁰The percentage of households where head and wife are from the same birthplace was always calculated just for households where at least one head was born abroad.

Table 6.2 shows a further measure of co-dependence that was made by looking at the proportion of boarders or second heads of household who come from the same country of origin as the head or wife of a household, if either of these were born abroad. This was considered to be a way to test the theory of chain migration, where single immigrants tend to reside with people from their country of origin (see chapter 2). We see that although the proportions are lower for both Jews and non-Jews than for spouses of the same country of origin, that the difference between the two groups is maintained, with a significantly higher proportion of Jews having boarders from the same country than their non-Jewish counterparts. This helps confirm the theory that immigrant settlements are settled by unaccompanied males coming ahead of their families in order to establish themselves economically. This also suggests that this factor was much stronger for the Jewish population during this period.

Table 6: Summary Social Data - Manchester Jews, 1881: Comparison of birthplace data		
6.2 Comparison of boarders' birthplace for foreign-born head or wife	COUNT	T-TEST
Mean percentage of Jewish households where boarder or second head same birthplace as head/wife ¹¹ :	60%	p=.0009
Mean percentage of non-Jewish households where boarder or second head same birthplace as head/wife:	28%	
Mean percentage of Jewish households where boarder or second head same birthplace as head/wife, in Red Bank:	60%	p=.0009
Mean percentage of non-Jewish households where boarder or second head same birthplace as head/wife, Red Bank:	26%	

Table 7 shows the proportion of sharing households by social class.

Table 7: Social Class Distribution - Manchester Jews, 1881¹²: Sharing of dwellings					
	I	II	III	IV	V
Percentage of Jewish heads sharing	7%	4%	12%	21%	13%
Percentage of non-Jewish heads sharing	3%	5%	6%	13%	17%

We see an indication that sharing is linked to economic factors, through the finding that the greatest proportions of shared dwellings are in the bottom two classes.

• Analysis of Domestic Servant Numbers as Indicator of Social Class - Manchester

Table 8 shows an analysis of the number of domestic servants per household. We see that there is a higher rate of servant numbers in Manchester overall, than in Red Bank taken alone. We also see that the number of servants per household is significantly greater for Jewish than for non-Jewish households, including the comparison within the high-density district.

Table 8: Social Data - Manchester Jews, 1881: Comparison of domestic servant numbers		
	COUNT	T-TEST
μ domestic servants in Jewish households	0.7	p<.0001
μ domestic servants in non-Jewish households	0.5	
μ domestic servants in Jewish households, Red Bank	0.2	p=.0203
μ domestic servants in non-Jewish households, Red Bank	0.1	

Table 9 shows the proportion of households with domestic servants by social class and the mean number of domestic servants per household, for the city overall. The figures in table 9 show that the proportion of households with servants is consistently higher for Jewish than for non-Jewish households. This finding is a further indication that Jewish households had a higher economic rating than their neighbours.

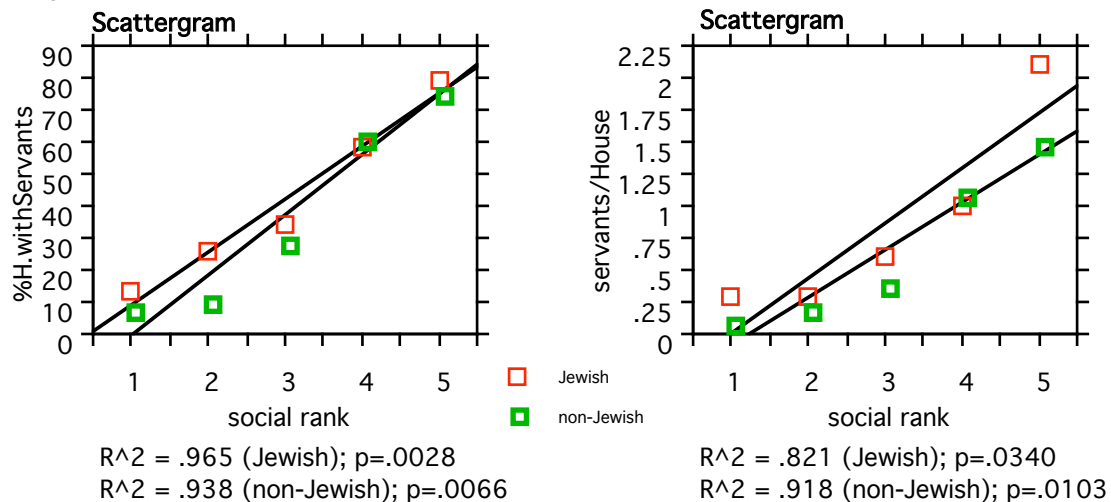
¹¹The percentage of households where boarder was from the same birthplace as head or wife was always calculated just for households where at least one head was born abroad, and only where boarders were present in the household.

¹² The statistics in this table are from a computer file which summarises data per individual household.

Table 9: Social Class Distribution - Manchester Jews, 1881: Distribution of Domestic Servants					
	Social class of household head				
	I	II	III	IV	V
% of Jewish heads having any domestic servants	79%	58%	34%	26%	13%
% of non-Jewish heads having any domestic servants	76%	62%	29%	11%	8%
mean domestic servants per Jewish household	2.1	1.0	0.6	0.3	0.3
mean domestic servants per non-Jewish household	1.5	1.1	0.4	0.2	0.1

These figures were plotted in a pair of scattergrams, see figure *e* below, which show for Jewish and non-Jewish households alike, a strong correspondence between social class and the existence of domestic servants in a household (table below left), and between social class and the actual number of domestic servants in a household (table below right). Both scattergrams suggest that social class was linked to servant numbers.

figure *e*: social rank vs. households with servants; social rank vs. number servants



• Analysis of Lodger Numbers as Indicator of Social Class - Manchester

The number of lodgers per household is considered another indicator of poverty. Analysis of lodger numbers was made to address theories on areas of initial settlement which suggest that these are likely to contain higher numbers of lodgers. This is both due to the pattern of migration where the male head of the family or young single men tend to settle ahead of the remainder of the family (as described above in the section on co-dependence) and also due to a tendency for poorer households to supplement their income through letting. We see in table 1.5 the number of lodgers in a street, compared for Jews and non-Jews in the city as a whole and in Red Bank alone. This table shows that Jewish households have higher rates of lodger numbers, although their differences are not statistically significant.

Table 10: Summary Social Data - Manchester Jews, 1881: Comparison of boarder/lodger numbers		
	COUNT	T-TEST
μ boarders/lodgers in Jewish households	0.6	insignificant difference
μ boarders/lodgers in non-Jewish households	0.5	
μ boarders/lodgers in Jewish households, Red Bank	0.7	insignificant difference
μ boarders/lodgers in non-Jewish households, Red Bank	0.4	

However, a clearer picture emerges in table 10a below, which compares Jewish households within Red Bank with all households outside of Red Bank and does the same for non-Jews. We find that the number of lodgers per household within the high density district is significantly higher. Likewise, the difference for non-Jews is also higher when comparing households within Red Bank with those outside Red Bank.

Table 10a: Summary Social Data - Manchester Jews, 1881: Comparison of boarder/lodger numbers		
	COUNT	T-TEST
μ boarders/lodgers in Jewish households, excluding Red Bank	0.8	p=.0092
μ boarders/lodgers in Jewish households, Red Bank	0.7	
μ boarders/lodgers in non-Jewish households, excluding Red Bank	0.7	p<.0001
μ boarders/lodgers in non-Jewish households, Red Bank	0.4	

Table 10a suggests that in all households, the existence of lodgers was significantly greater within the Red Bank district than outside it. It also shows that there were more lodgers in Jewish households.

3.2 Social Class Analysis - Leeds

• Indicators of Co-Dependence - Leeds

Table 11.1 shows the mean household size for Jewish and non-Jewish households. We see that the household sizes are almost identical for All Leeds and Leylands alone (unlike Manchester, where households in Red Bank were larger). However, like Manchester, we see that Jewish households are significantly larger than their non-Jewish counterparts.

Table 11: Summary Social Data - Leeds Jews, 1881		
11.1 Comparison of household size		
	COUNT	T-TEST
mean inhabitants per Jewish household ¹³ :	5.8	p<.0001
mean inhabitants per non-Jewish household:	4.3	
mean inhabitants per Jewish household, Leylands:	5.9	p<.0001
mean inhabitants per non-Jewish household, Leylands:	4.2	

The link between immigrant families and sharing of households was checked by selecting only those streets where at least one Jewish head was born abroad and recalculating the mean household size. It was found that the mean inhabitants per Jewish households rose from 5.8 to 6.1 for all Leeds and rose slightly to 6.0 when Leylands only was selected. This may confirm a relationship between large households and whether a head or wife were born abroad.

The percentage of households sharing dwellings with another family can be seen in table 11.2. We see firstly that the proportion of Jewish households sharing is greater than non-Jewish households, especially in Leylands. We also see that the percentage of Jewish households sharing is higher within Leylands when compared with Leeds overall, whilst the difference for non-Jews is marginal.

Table 11: Summary Social Data - Leeds Jews, 1881		
11.2 Comparison of household sharing rates		
μ percentage Jewish households sharing	9.8	p=.0006
μ percentage non-Jewish households sharing	2.9	
μ percentage Jewish households sharing, Leylands	15.5	p<.0001
μ percentage non-Jewish households sharing, Leylands	2.4	

Table 12.1 summarises data on the birthplace of Jewish and non-Jewish households. We see that high proportions of Jewish heads and wives in households share the same country of origin as in Manchester, whilst the proportion within Leylands is even greater. We also see a significantly greater proportion of Jews having a common birthplace, when compared with non-Jews. Both of these findings duplicate those for Manchester.

¹³The figures for mean inhabitants were the total inhabitants per household, less servants.

Table 12: Summary Social Data - Leeds Jews, 1881		
12.1 Comparison of birthplace data	COUNT	T-TEST
Mean percentage of Jewish heads same birthplace as wife ¹⁴ :	68%	p<.0001
Mean percentage of non-Jewish heads same birthplace as wife:	33%	
Mean percentage of Jewish heads same birthplace as wife, Leylands:	89%	p<.0001
Mean percentage of non-Jewish heads same birthplace as wife, Leylands:	43%	

We also see in table 12.2 an identical pattern to Manchester when analysing the proportion of boarders or second heads who share the same country of origin as the head or wife; with considerably higher rates of 'same birthplace' for Jewish households than for non-Jewish. Like in Manchester, the non-Jewish proportions are lower across the board.

Table 12: Summary Social Data - Leeds Jews, 1881		
12.2 Comparison of birthplace data	COUNT	T-TEST
Mean percentage of Jewish households where boarder or second head same birthplace as head/wife ¹⁵ :	85%	p=.0016
Mean percentage of non-Jewish households where boarder or second head same birthplace as head/wife:	41%	
Mean percentage of Jewish households where boarder or second head same birthplace as head/wife, in Leylands:	86%	p=.0152
Mean percentage of non-Jewish households where boarder or second head same birthplace as head/wife, in Leylands:	48%	

Lastly, we see in table 13 the distribution of shared dwellings across the classes in Leeds¹⁶. We see that the higher proportions of shared dwellings appear in the bottom classes, especially in the case of the Jewish households. This result suggests a correspondence between sharing and lower social class.

Table 13: Social Class Distribution - Leeds Jews, 1881¹⁷: Sharing of dwellings					
	I	II	III	IV	V
Percentage of Jewish heads sharing	0	5%	15%	23%	0
Percentage of non-Jewish heads sharing	2%	3%	4%	4%	1%

• Analysis of Domestic Servant Numbers as Indicator of Social Class - Leeds

Table 14 shows a comparison of domestic servant numbers per household. We see that in Leeds overall, Jewish households have a greater number of domestic servants than non-Jewish households, but the difference is not statistically significant, as was the case in the Manchester analysis.

Table 14: Social Data - Leeds Jews, 1881: Comparison of domestic servant numbers		
	COUNT	T-TEST
μ domestic servants in Jewish households	0.4	insignificant difference
μ domestic servants in non-Jewish households	0.2	
μ domestic servants in Jewish households, Leylands	0.1	insignificant difference
μ domestic servants in non-Jewish households, Leylands	0.1	

Table 15 shows the distribution of domestic servants per class. We see that the proportion of Jewish households having any domestic servants is consistently lower per class than non-Jewish households and

¹⁴The percentage of households where head and wife are from the same birthplace was always calculated just for households where at least one head was born abroad.

¹⁵The percentage of households where boarder was from the same birthplace as head or wife was always calculated just for households where at least one head was born abroad.

¹⁶The class was defined according to the occupation of the first head listed in the census, unless the head was absent and then the second head's occupation was considered - although invariably both or all heads belonged to the same class.

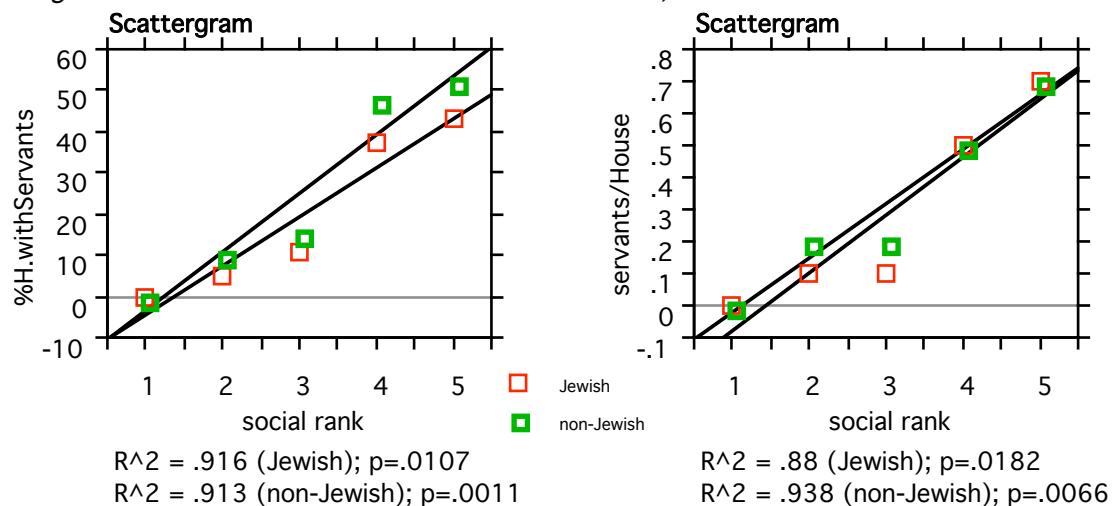
¹⁷ The figures are taken from the a computer file which summarises data per individual household.

also that the mean domestic servants per household is also lower for Jews (although marginally so). This finding contradicts that found above for Manchester and may be a factor of the relative youth of Jewish settlement in Leeds; who had less chance of becoming established economically.

Table 15: Social Class Distribution - Leeds Jews, 1881: Distribution of Domestic Servants					
	Social class of household head				
	I	II	III	IV	V
% Jewish heads having any domestic servants	43%	37%	11%	5%	0
% non-Jewish heads having any domestic servants	52%	48%	19%	10%	0
mean domestic servants per Jewish household	0.7	0.5	0.1	0.1	0
mean domestic servants per non-Jewish household	0.7	0.8	0.2	0.2	0

As in Manchester, correlations were made for social class vs. servants, as can be seen in figure *f* below, which shows strong correspondences between social class and the existence of domestic servants and the actual number of domestic servants in a household. These results help confirm a link between social class and servant numbers.

figure *f*: social rank vs. households with servants; social rank vs. number servants



• Analysis of Lodger Numbers as Indicator of Social Class - Leeds

Table 16 compares boarder/lodger numbers in Leeds. Here we see that within the high-density district the differences between Jewish and non Jewish households are insignificant. This result is similar to that found for Manchester.

Table 16: Summary Social Data - Leeds Jews, 1881: Comparison of boarder/lodger numbers		
	COUNT	T-TEST
μ boarders/lodgers in Jewish households	0.4	insignificant difference
μ boarders/lodgers in non-Jewish households	0.4	
μ boarders/lodgers in Jewish households, Leylands	0.5	insignificant difference
μ boarders/lodgers in non-Jewish households, Leylands	0.4	

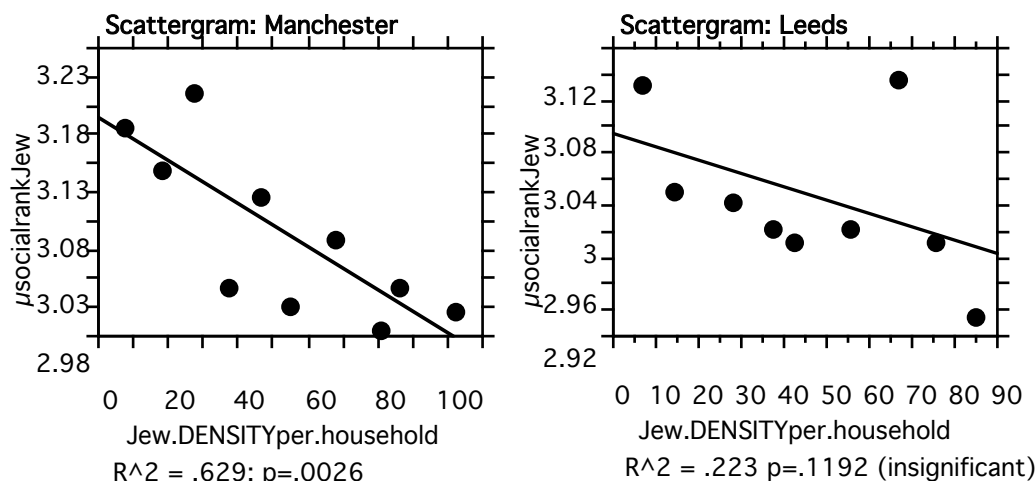
4. Comparison of Social and Ethnic Density Parameters

Analysis was undertaken to see if there was a relationship between the density of Jews per street and the social rank of Jewish head. These were done by assigning each household to a density band between 0>100% (calculated without Jewish lodgers who were lodging in non-Jewish households) and averaging out spatial and social values per band. Density was plotted against the mean social rank for the band, comparing Jewish to non-Jewish households for the city overall. Social Rank refers to the numbers assigned to each of

the social classes in order to make them statistically measurable; class V households became social rank 1, class IV became social rank 2 and so on, the higher the rank the higher the social class on average.

We see in the pair of scattergrams in figure *g* below that there is a strong reverse correspondence between density and social rank in the Manchester case, which suggests that the Jews living in lower densities (with more non-Jewish than Jewish neighbours), are likely to have a higher social rank¹⁸. In Leeds, the correspondence is not statistically significant, although the same trend is apparent. The lack of correspondence is evidently caused by band 60>70% over-performing for social rank. The reason that band 60>70% over-performs is due to the occupations of some of the Jewish families in Russell Place, which if omitted cause the results for Leeds to be in line with those for Manchester¹⁹.

Figure *g*: Jewish density per household vs. mean Jewish social rank, Manchester; Leeds, all streets



In summary, we see a strong indication that Jews living in higher density (in streets with many other Jews) tended to be of lower social rank.

5. Spatial and Social Analysis

5.1 Spatial and Social Analysis - Manchester

Having established a strong link between social measures and social class, as defined by Armstrong and having studied the difference between the Jewish and the non-Jewish households socially and having found a trend relating social ranking and Jewish density, the next step in the analysis is to see if there is a relationship between social measures and the spatial location of Jewish and non-Jewish households.

The following series of scattergrams shows the result of analysing the relationship between spatial values and social class for the Red Bank district only.²⁰ Due to there being only five points on the scattergrams, they cannot be considered statistically significant, but can indicate a trend. Each pair of scattergrams was created at the same scale, so that points could be compared between Jewish and non-Jewish groups.

We can see in the pair of scattergrams in figure *h* below, that for both Jewish and non-Jewish groups, there is a strong correspondence between global integration and social rank. In other words, the higher the social rank, the more spatially integrated is the household, on average. We see that there is a weaker

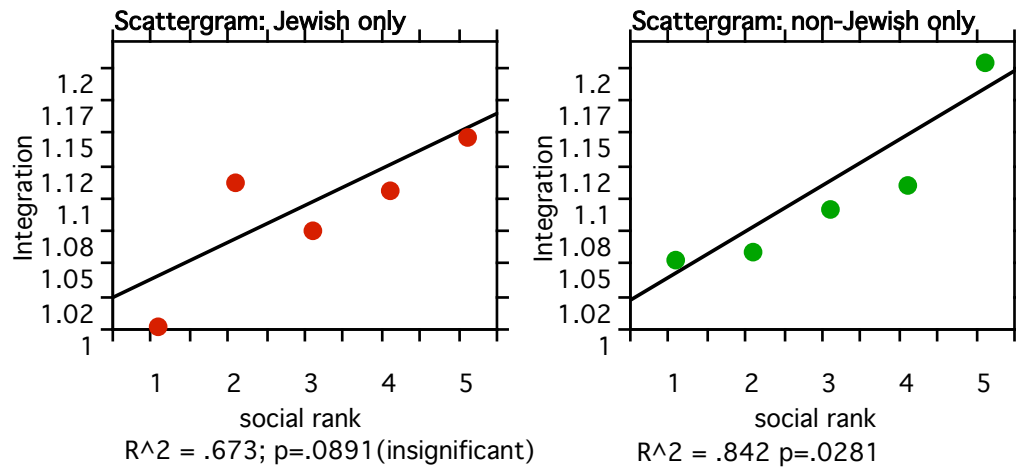
¹⁸The scattergrams were taken from computer files which summarise in turn, Jewish and non-Jewish households per density band.

¹⁹Russell Place is the street running east-west immediately to the north of the City Square. It is one of the 4 streets in the 60<70% band. Two of the six Jewish families in this street fall into social rank II: Master Tailor Employing 10 Men, 20 Females and Master Tailor Employing 8 Men, 12 Females. If the two families in Russell Place were redefined as rank III, the correlation would be $R^2 .642$; $p = .0094$ and would therefore be in line with the results for Manchester.

²⁰The scattergrams are based on a computer file which summarised data on all individual households in Red Bank, by class and categorises by Jewish/non-Jewish.

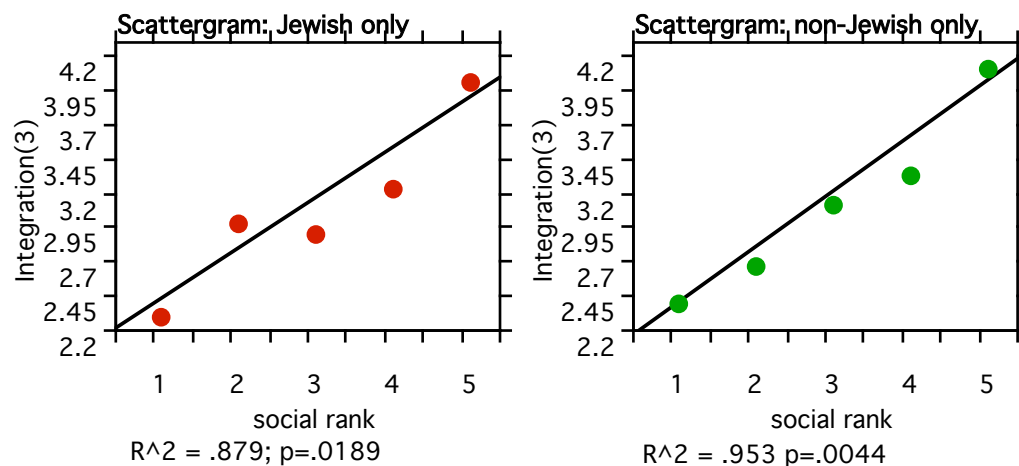
correspondence for Jewish households and this is due to the fact that class IV Partly Skilled is over-performing for global integration; in other words Jewish households belonging to a low social class are located on more globally integrated streets than expected²¹. We also see that the global integration measure is higher for professional classes amongst the non-Jews.

Figure h: social rank vs. integration radius n - Jewish/non-Jewish streets



The pair of scattergrams in figure i below shows the same patterns for local integration, with an even stronger correspondence for the non-Jewish households.

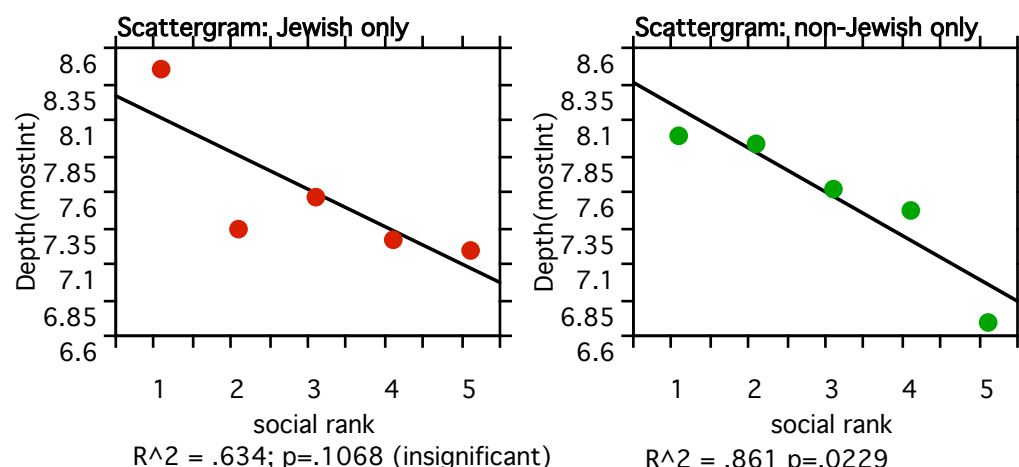
Figure i: social rank vs. integration radius 3 - Jewish/non-Jewish streets



The next pair of scattergrams, figure j below, looks at the mean distance from the most integrated street in Manchester. This is an indication of distance from the spatial core of the city. It was noted in chapter 4 that Red Bank is physically and spatially distant from the spatial core - this pair of scatters looks to see if there is a relationship between proximity to the core and higher social rank.

²¹This was found to be due to Jewish households on York Street, the main global integrator in the district and Clarence Street.

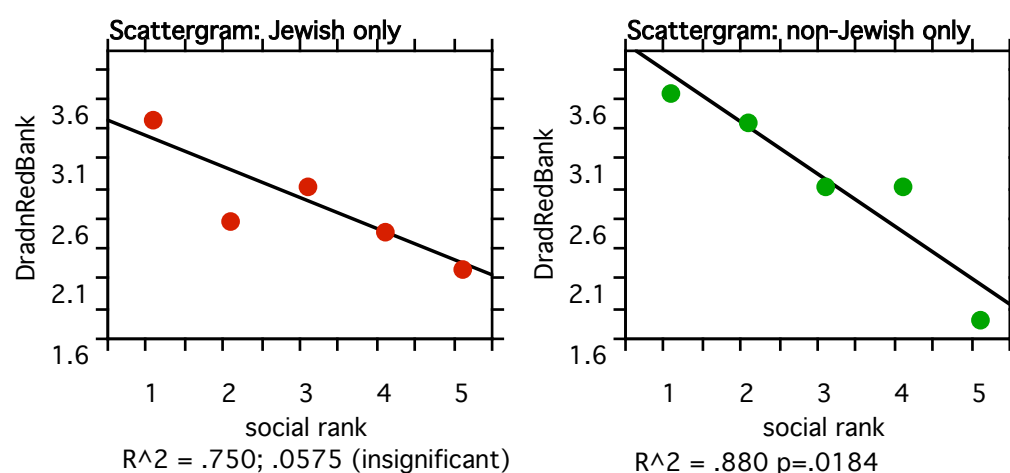
Figure j: social rank vs. depth from the radius n integration core - Jewish/non-Jewish streets



We see in figure *j* that in both cases that there is a strong relationship between greater distance from the core and lower social rank; but it is notable that the Jewish households of rank IV are closer to the core than expected. This finding is in line with the findings above, which showed that this class over-performed for all other spatial parameters.

The two pairs of scattergrams, figures *k* and *l* below, look at depth from the most globally and locally integrated streets in Red Bank²². We see that in both cases there is a correspondence between social rank and proximity to the main integrators within the district. This is however, stronger for non-Jews.

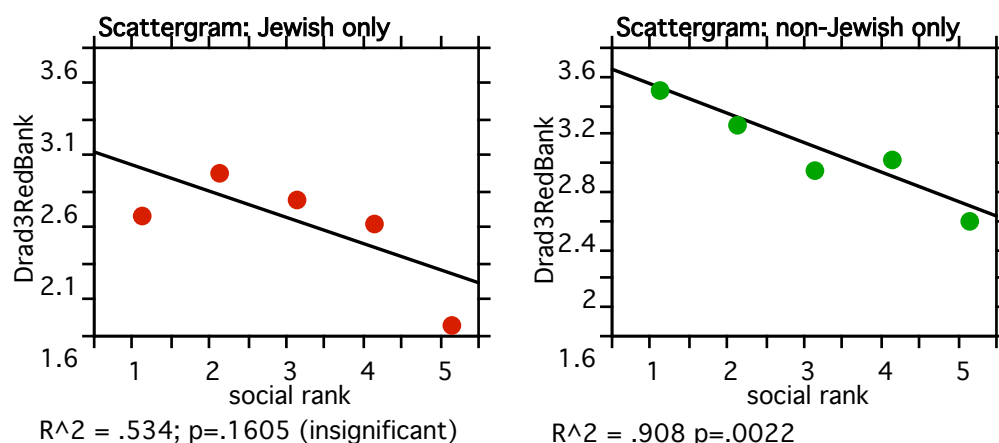
Figure k: social rank vs. depth from the most globally integrated in Red Bank - Jewish/non-Jewish



We also see in figure *l* that in the case of Jewish heads, the top and bottom classes are relatively close to the most locally integrated street in contrast with the non-Jewish households which are all distanced from the local core; with the range of depth for Jewish being 1.75 to 2.80 and for non-Jewish 2.47 to 3.37. In other words, in the main streets, non-Jewish households tend to be more distanced than their Jewish counterparts.

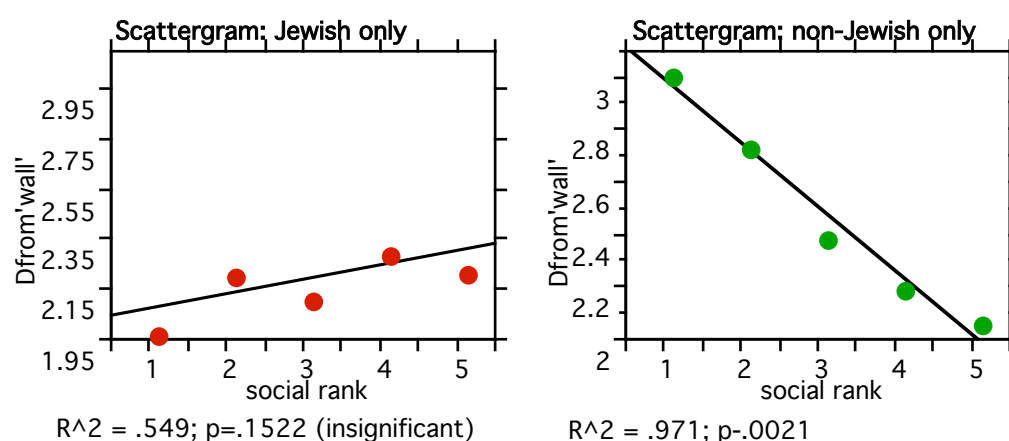
²²See fig. a in chapter 5 for an illustration of the key streets in Red Bank.

Figure l: social rank vs. depth from the most locally integrated in Red Bank - Jewish/non-Jewish streets



Lastly, depth from Red Bank 'wall' (the streets surrounding the district) is shown below in figure m. Here we see a distinct difference between the two groups. The non-Jewish households follow the pattern above, of reverse correspondence between depth and class; indeed the correspondence in this case is the highest so far. However, in the case of the Jewish households, we see that depth is first of all within a very narrow band of proximity - with all classes being between 1.95 and 2.35 steps away (compared with a range of 3.1 to 5 steps away for non-Jews). In addition, we see a tendency for higher classes to be slightly more distant from the 'wall'.

Figure m: social rank vs. depth from the Red Bank 'wall' - Jewish/non-Jewish streets

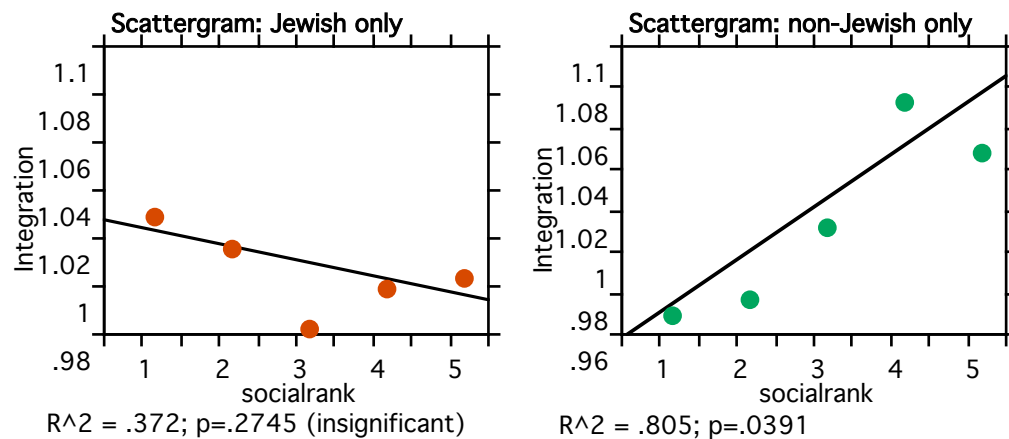


5.2 Spatial and Social Analysis - Leeds

The following set of scattergrams repeat the analysis done above for Manchester, and analyses the relationship between spatial values and social class within the Leylands area only²³. It should be noted that there was only one case of class V Unskilled for Jewish households (this was for a synagogue caretaker). The following pair of scattergrams in figure n below show that non-Jewish households repeat the findings for Manchester, with a correspondence between integration and social class. However, Jewish households show an insignificant reverse correspondence between the two measures, with the middle (and largest) class under-performing for global integration. It is further apparent that classes III, II and I have a trend towards the same pattern as non-Jewish households and it is the bottom two classes which perform in reverse.

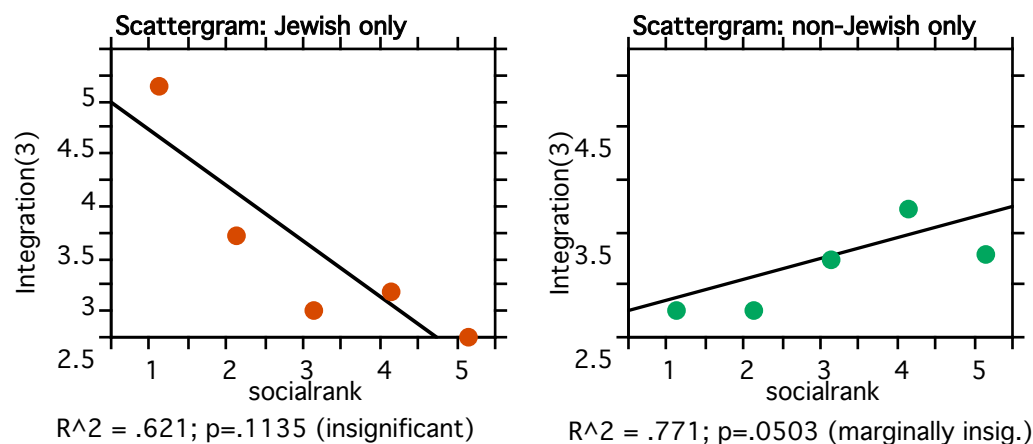
²³The scattergrams are based on a computer file of values which summarised data on all individual households in Leylands, by class and categorised by Jewish/non-Jewish.

Figure n: social rank vs. integration radius n - Jewish/non-Jewish streets



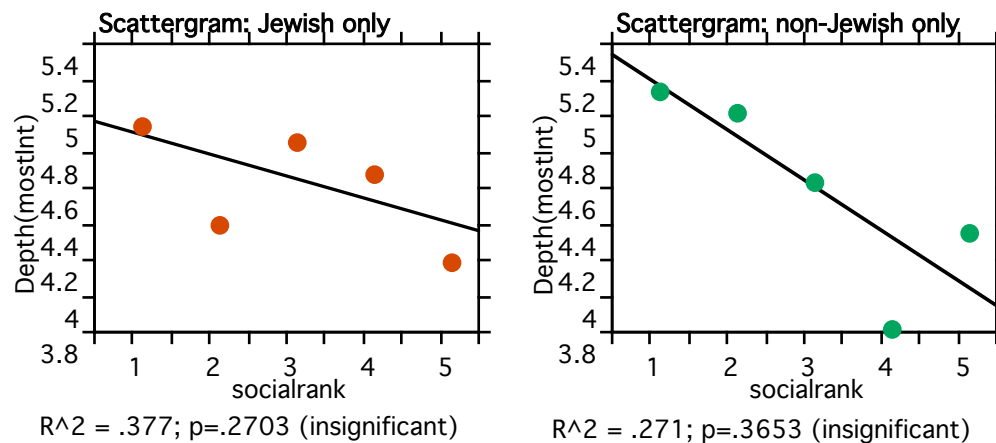
The next pair of scattergrams, figure o, looks at local integration. Here we see that non-Jewish households repeat the pattern for Manchester, with higher social class corresponding with higher local integration. On the other hand, Jewish households reverse the trend. It is notable that the single case of class V has the highest values for local and global integration and this may be due to the fact that this individual was living on the premises of the synagogue - so his spatial location was not directly linked to his social class.

Figure o: social rank vs. integration radius 3 - Jewish/non-Jewish streets



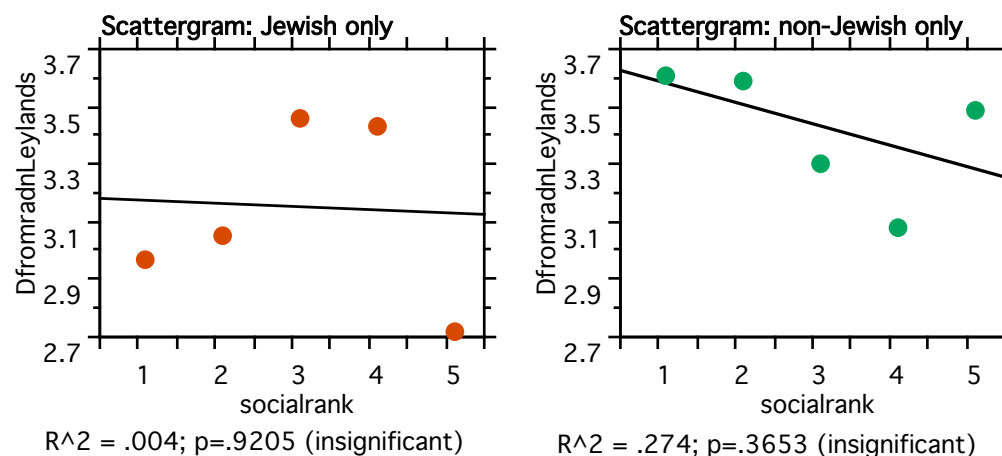
The next pair of scattergrams, in figure p below, looks at the mean distance from the most integrated street in Leeds. This is an indication of the distance from the spatial core of the city. It should be noted that chapter 4 pointed out that the Leylands was geographically close to the spatial core, although relatively spatially segregated due to the geography and distribution of the streets (which are cut off to the east by streams). Here we see very similar patterns to those in Manchester, with a relationship between greater distance from the core and lower social rank and as in Manchester, we see that class IV is closer to the core than expected. We also see that class II for non-Jews is closer than expected.

Figure p: social rank vs. depth from the radius n integration core - Jewish/non-Jewish streets



The scattergrams in figure q below show the relationship between social rank and depth from the most globally integrated street in Leylands²⁴. Neither Jewish or non-Jewish streets follow the same pattern as Manchester, where there was a clear relationship between class and proximity to the main global integrator in Red Bank. Rather, we see that for non-Jews the pattern is the same for all classes except the professional, who are more distant than expected and for Jews, we see that there is almost no correspondence at all.

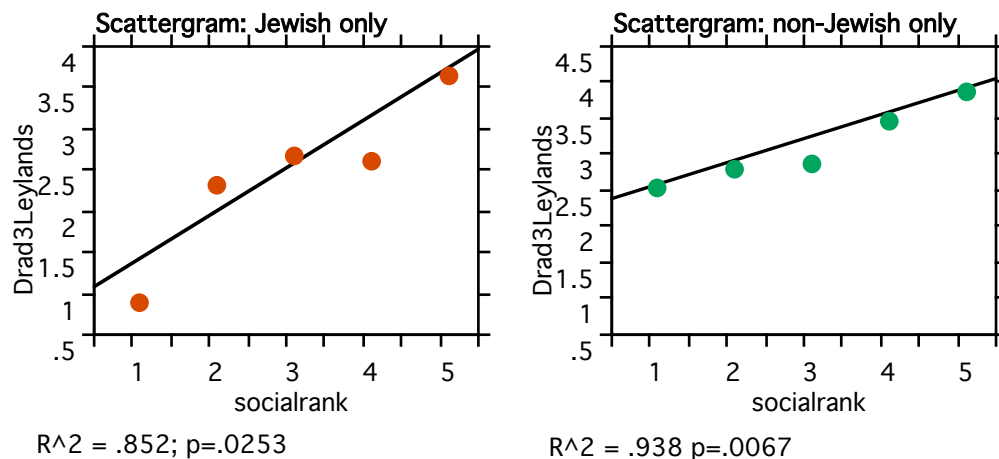
Figure q : social rank vs. depth from the most globally integrated in Leylands - Jewish/non-Jewish streets



The case of distance from the most locally integrated street in Leylands, in figure r below, is very clear cut and repeats the findings for Red Bank in Manchester, whereby the higher the class, the closer it is to the most locally integrated street.

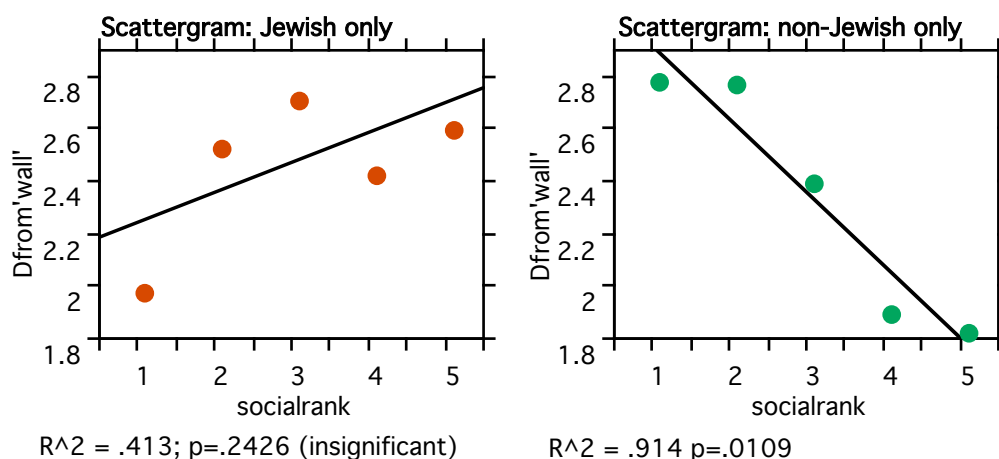
²⁴See fig. b in chapter 5 for an illustration of the key streets in Leylands.

Figure r: social rank vs. depth from the most locally integrated in Leylands - Jewish/non-Jewish streets



Lastly, depth from the Leylands 'wall' (the streets surrounding the district) is shown below in figure s. Here, as in Manchester, there is a distinct difference between the two groups. The non-Jewish households follow a reverse correspondence between depth and class; where the higher the class, the closer to the Leylands 'wall', whilst the Jewish households tend to be farther from the wall, the higher their class, although the upper two classes are within the same range as class IV and III.

Figure s: social rank vs. depth from the Leylands 'wall' - Jewish/non-Jewish streets



6. Summary and Discussion

This chapter continued to show that both in Manchester and in Leeds there were similar and measurable patterns of settlement for the Jews of 1881.

By analysing the distribution of social class amongst the Jews, this chapter has suggested that Jewish social class, as defined by occupation, was consistently higher than for non-Jews, both within and without the Red Bank and Leylands districts. It was proposed that the difference was due to under-representation of the Jews in class IV and class V type occupations, rather than them being over-represented in the upper classes. Other indicators where Jews were shown to be of a higher social class than their neighbours were:

- Mean number of servants per household: In both cities and for all inhabitants it was shown that servants were an indicator of social rank - by showing that their numbers went up with social class defined by occupation and by showing that there were twice as many servants in the city overall than in the Red Bank and Leylands districts taken alone. This measure indicated that Jewish households were better-off than their non-Jewish counterparts; although this difference was only statistically measurable in the longer established settlement of Manchester.

On the other hand, some of the other indicators of social rank or class suggested a lesser social ranking for the Jews than the non-Jews. More complex analysis of this question highlighted the possibility that this was due to the fact that the Jews followed a different pattern of household structure - one that was typical of immigrant settlement. However, even when compared with non-Jewish immigrants, the immigrant settlement typologies were more prominent amongst the Jews than the non-Jews. The indicators in question were as follows:

- Households size and proportion of sharing households: Analysis of the number of persons per household showed that Jewish households were significantly larger than non-Jewish households and this was linked to the fact that a much greater number of Jewish than non-Jewish households had more than one head. This was especially the case within the Red Bank and Leylands districts.
- Spouses from the same country of origin: It was found in the previous chapter that, especially within the Red Bank and Leylands districts, Jews were much more likely to have been born abroad (for example 96% of Jewish heads or wives in Leylands were born abroad, compared with 12% of non-Jews in Leylands). Following from this, the question of whether both spouses came from the same country of origin was analysed. This showed that up to 90% of foreign-born Jews shared the same country of origin as their spouse, as compared with only up to 43% of foreign-born non-Jews. Again, the proportions were significantly higher within the Red Bank and Leylands districts.
- Boarders or sharing heads from the same country of origin: It was found that in sharing households, Jews were twice as likely to share with someone from the same country as non-Jews. Both this and the above indicator can be viewed as of greater significance, due to the fact that the Jews came from many different countries, whilst foreign-born non-Jews were mainly from Ireland (and might have been more likely to give support to their fellow countrymen). One possible explanation for the latter finding is that the Irish had been in the country for a longer time and had less need to share; however, this is not confirmed by the finding that this group had only been in the country 4 to 7 years longer than the Jews. Another possible explanation is that the Irish had started to disperse from the districts of initial settlement and those remaining did not constitute a cohesive community.
- Mean number of lodgers or boarders per household: here there were marginal findings that indicated that Jewish households had more lodgers on average than non-Jewish households, especially within the Red Bank and Leylands districts. There were significant findings showing greater numbers of lodgers in immigrant households.

These findings on sharing and household size are a strong indication that especially within the high density district, Jewish households were measurably different in household structure from non-Jewish households, even when compared with other immigrants. The link between these measures and typologies of immigrant settlements in general were raised in chapter 2, which suggested that many immigrant families live within larger households than their neighbours for other reasons than economic need, such as co-dependence. Co-dependence as a factor in immigrant populations has also been confirmed by historical studies, such as that of the Jews of London - as described by C. Russell, in his study of the Jewish 'ghetto' of London in the late 1880s:

'[Jewish immigrants] have no particular objection to overcrowding. They have been thoroughly inured to the worst conditions in their native country; and what to an Englishman would be intolerable is scarcely a hardship to the newly arrived immigrant from Poland' [see Russell and Lewis (1900), p. 21].

Further analysis of the relationship between settlement and social class was made by analysing the measure of ethnic density (the proportion of Jews to non-Jews) against social class. This helped confirm that the area of high density, the area considered the 'ghetto', was one where social class as defined by occupation was generally lower. The link between higher class and lower ethnic density was much more apparent in Manchester. It is conceivable that the link was clearer here due to the fact that this was a more established settlement, which had spread much further afield than in Leeds - this factor was pointed out in chapter 4, where evidence was presented that small numbers of Manchester Jews had moved to middle and upper-middle class districts by 1881. The findings on class and density help confirm the conclusions at the end of the previous chapter, that Jews living in high ethnic density tended to be from the poorer classes

Lastly, through analysing the relationship between social measures and spatial measures, it was possible to establish that both for the Jews and for the non-Jews, higher social class tended to correspond with higher

spatial integration, as follows:

In the first instance, the measures of global and local integration and distance from the global integration core showed a positive relationship between spatial and social measures. The relationship was consistently stronger for non-Jewish than for Jewish households and it was apparent that for the latter group, other factors may have been coming into play.

This became clearer when the spatial measures within the Red Bank and Leylands districts were analysed. These showed that when considering the main local street within the districts, both Jews and non-Jews had a strong relationship between the axial proximity to the street and higher social class. When considering the main global integrator, this relationship only held for Manchester; in Leeds the link to the main global integrator within the Leylands district held for neither Jews or non-Jews, which suggests that the district itself had a different spatial structure than its equivalent in Manchester - a finding that follows on from the findings on spatial analysis in the previous chapter, where only in Manchester was there a strong correspondence between ethnic density and global integration, local integration and control.

Lastly, axial distance from the 'wall' (the boundary surrounding each of the Red Bank and Leylands districts) showed a distinct difference between Jewish and non-Jewish households, whereby for the Jewish households, higher social rank was strongly related to proximity to the 'wall'. This pattern held for both Manchester and Leeds and in both cities, non-Jewish households followed a different pattern altogether.

In conclusion, taking all these findings together, it is evident that there are distinct social and socio-spatial differences between the areas of dense Jewish settlement - the areas considered the 'ghettos' in Manchester and Leeds - and the other areas of the city. This strengthens the findings on the distinctiveness of the Red Bank and Leylands districts in the previous chapter when spatial factors were considered alone. This may be of more general significance than the spatialisation of Jewish settlement if we consider the characteristics of the Red Bank and Leylands districts studied here. Notwithstanding the distinctive Jewish population, the majority of the population in each of the districts was British-born. The findings of this chapter suggest that most of the non-Jewish population were poorer than average even when compared to their (Jewish) immigrant neighbours and that there was a relationship between spatial characteristics and poverty, as was also proposed at the end of the previous chapter.

Two key findings in this chapter led to further analysis:

- The previous chapter suggested that when comparing Jewish to non-Jewish households within the Red Bank and Leylands districts, Jewish households had lower rates of spatial integration, especially for local measures. This chapter helped explain this finding by showing that other differences were apparent when comparing Jews to non-Jews in the Red Bank and Leylands districts. These findings suggest that the spatial and social findings may be linked to the immigrant nature of these areas. However, this chapter has also suggested that foreign-born Jews have higher measures of immigrant settlement indicators than foreign-born non-Jews. In other words, the pattern of Jewish settlement may be more a question of their 'Jewishness' than their 'foreignness'. This question will be looked at in chapter 8, which studies the formation of the settlement of the Jews in Leeds over six decades.
- These findings also raise the question of whether the spatial and social differences are due to the fact that the Jews occupy different types of occupations: for instance we see fewer Jews in the bottom two classes, and we find that Jews of higher classes live in closer proximity to the edge of the Red Bank and Leylands districts; as if they are huddling close to the boundary. The following chapter studies the question of Jewish occupation more closely, in order to establish whether the Jews follow a measurably different pattern of occupation than their non-Jewish counterparts.

CHAPTER 7

Analysis of Spatial Distribution of Occupations: Manchester 1881

1. Introduction

The previous chapter found that there was a distinct difference in the class distribution as defined by occupation, between Jewish and non-Jewish households; especially finding an under-representation of Jewish heads in the lower two classes. The previous chapter also found certain spatial relationships between class position and proximity to main integrators and the boundary of the districts considered 'ghettos' in Manchester and Leeds: Red Bank and Leylands, respectively. This chapter studies the occupation distribution of the Jews in Manchester in order to establish whether these constituted a distinctive difference between the Jews and the host society. The reason that Leeds was not studied in this case was principally due to the fact that the occupational structure of the two cities was not directly comparable, as the Jewish community of Leeds was relatively new to the area; Manchester posed a more interesting case since it was a larger and more established occupational base both for the Jews and for the general population.

The main source of data in this chapter is the census data of 1881 and the business directories of the three years before and after the census year (see chapter 3 for a full explanation of this data-set) for Manchester. In addition, data on the occupations of the city of Manchester as a whole were taken from a summary of the 1881 census called: 'Census of England and Wales: ages, condition as to marriage and birthplaces of the people' which lists occupations per industrial category in each urban district of which the population is over 50,000 [see Her Majesty's Government (1883)].

This chapter studies the occupational distribution in Manchester by classifying the occupations of all Jewish households as well as analysing the distribution of work addresses for Manchester Jews. It should be pointed out that until the 20th century, occupation was listed as 'Rank, Profession or Occupation'. This did not make clear whether the occupation of the individual or the industry to which his employer belonged were requested. It is for this reason that occupation information was sometimes ambiguous and this is also the reason that occupations tended to be summarised by census authorities. The occupations of heads, boarders and lodgers were simplified in this analysis in order to enable classification; for example, tailor, seamstress and finisher were all defined as 'tailor'. In all 190 Jewish occupations were found by this method; in contrast with 377 occupations amongst the general population.

It should be noted that the occupations analysed here only include occupations of heads of household, sole lodgers and sole boarders and in cases of sharing households, the occupation of second and third head (and not heads' wives or boarders' wives). This was in order to deal with the lack of clarity regarding female employment, which is difficult to enumerate in many cases, but especially amongst the Jews since, as Kershen (1995) asserts, the Jewish male (even more than his gentile counterpart) was unlikely to admit that his wife had to work, even if that was the case and 'it was only in times of extreme economic necessity that Jewish married women worked outside the home... [although] the reality was different, 'home' and 'work' were not mutually exclusive and the married Jewish woman was often forced to carry out a variety of money-making occupations within her own or in another's home... [such as] the running of shops, the breeding of hens... as well as dressmaking and market trading'¹. When heads' occupations are referred to in the text below, this includes sole boarders and lodgers.

¹See Kershen (1995), p. 15 and Cesarani (1990), pp. 55-76.

The analysis looks at the occupation distribution of the Jewish population, both by home address and by work address, where available. This chapter opens with an investigation into the historical belief that the Jews tend to occupy a narrow bank of trades. It continues with an analysis of occupation by industrial classification. Whereas the previous chapter dealt with the distribution of social classes, as defined by occupation, this section deals with categories of the type of industry or commodity in which heads were employed. After this comes an analysis of household structure through occupation - looking at the question of occupational enclaves. Following this the spatial distribution of work addresses is looked at to see the relationship between distance travelled to work and economic status. Lastly, the employment structure of the Jewish community is investigated. Throughout the chapter Jewish cases are compared with non-Jewish cases and the district of high density Jewish settlement (Red Bank) is compared with the city overall.

2. Analysis of Common Jewish Occupations

The purpose of this section is to analyse the distribution of the most common Jewish occupations. The analysis is undertaken firstly to see if the most common Jewish occupations were typical of the city overall; secondly to see if non-Jews were occupied in similar rates in those trades, especially in the Red Bank area and lastly, whether the Jewish occupation distribution mirrored that of the city overall.

2.1 Analysis of Jewish households in Manchester overall

Tables 1.1 and 1.2 analyse the top ten occupations cited by Jewish heads of household, or by sole Jewish boarders and lodgers in the 1881 census of Manchester. Tables 1.1 analyses the home addresses of these occupations; while table 1.2 analyses the addresses where heads, boarders and lodgers were found to work according to the business directories. Note that this section relates to Red Bank as a sub-area of Cheetham. In the following sections it is compared with the remaining districts of Manchester together.

Table 1.1 shows the breakdown of the ten most common Jewish occupations in the second column and in the third column lists for each occupation, which are the districts which contain the largest number of heads etc. in that occupation. For example, 50% of all cabinet makers were found to live in Cheetham and a further 33% of cabinet makers were found to live in central Manchester.

Table 1: Common Jewish Occupations: analysis of district distribution²		
1.1 Home addresses		
OCCUPATION	NO. CASES (% OF ALL)	DISTRICTS THAT CONTAIN LARGEST NUMBERS OF EACH OCCUPATION
1. cabinet maker	12 (1%)	Cheetham (50%); central Manchester (33%)
2. cap or hat maker/manufacturer	41 (4%)	Cheetham (83%)
3. commission agent	25 (2%)	Cheetham (63%); Broughton (25%)
4. glazier	73 (7%)	Cheetham (68%); central Manchester (31%)
5. jeweller or watchmaker	42 (4%)	Cheetham (53%); Broughton (13%)
6. merchant/shipping merchant	118 (11%)	Chorlton (53%); Cheetham (33%)
7. pawnbroker	8 (1%)	Cheetham (67%); Broughton, Moss Side (17%)
8. tailor	271 (25%)	Cheetham (77%); central Manchester (15%)
9. commercial traveller	70 (7%)	Cheetham (74%); Broughton (10%)
10. waterproof maker	26 (2%)	Cheetham (62%); central Manchester (23%)
TOTAL:	682 (65%)	

It is evident from the data in the second column of table 1.1, that by far the most prominent Jewish occupation is tailoring. Indeed, the category of tailor could have been expanded to include supplementary occupations, such as tassel maker. Moreover the top five occupations (marked in bold): glazier, jeweller, merchant, tailor, traveller comprise 54% of all Jewish heads. We also see in general, a concentration of the majority of Jews in a small number of occupations and this table shows that the ten most common occupations comprise 65% of all male Jewish heads, boarders and lodgers. Considering that there are 190 Jewish occupation groups in all, the ten most common groups comprise 5% of all Jewish occupation

²The statistics in this table are from a computer file which compiled statistics on Jewish households, which included analysis of occupation and work addresses per household. For a full explanation of how computer files were created, see appendix on compilation methods.

groups. In other words, over 60% of Jewish heads of household are concentrated in 5% of all Jewish occupation groups.

Table 1.1 also suggests that the majority of common occupations are concentrated in Cheetham. If we take into account that Cheetham contained most Jewish home addresses, it is interesting to note that only in the case of the occupation of merchant/shipping merchant, does upper middle-class Chorlton move to the top place for home addresses for the occupation. We also see that central Manchester is most frequently found to hold the second largest proportion.

Table 1.2 shows the incidence of common Jewish occupations according to their work addresses. Since work addresses were available for only some of the Jewish households in Manchester, the number of cases available is shown alongside the district split.

Table 1: Common Jewish Occupations: analysis of district distribution	
1.2 Work addresses	
OCCUPATION	DISTRICTS THAT CONTAIN MOST OF EACH OCCUPATION
1. cabinet maker	central Manchester (100%) - 2 cases
2. cap maker/mfr	central Manchester (55%); Cheetham (45%) - 11 cases
3. commission agent	central Manchester (58%); Cheetham (25%) - 12 cases
4. glazier	(no work addresses available)
5. jeweller or watchmaker	central Manchester (69%); Cheetham (31%) - 16 cases
6. merchant/shipping merchant	central Manchester (84%) - 56 cases
7. pawnbroker	Cheetham; central Manchester; Moss Side (33% each) - 3 cases
8. tailor	Cheetham (57%); central Manchester (33%) - 21 cases
9. commercial traveller	Cheetham (80%); central Manchester (20%) - 5 cases
10. waterproof maker	central Manchester (63%); Cheetham (38%) - 8 cases

The results show that most occupations have a majority of their work addresses in central Manchester, whilst the remaining cases: pawnbrokers, tailors and travellers are located in the semi-residential district of Cheetham. Historical analysis has suggested that the tailor workshops grew out of workshops that were dependent on piece-making and out-working (see chapter 4). This may explain the finding that almost 60% of tailoring work addresses are found in Cheetham. This finding may also suggest that this was an occupation predominated by the poorer workers of the district. Further analysis was undertaken to see the location of tailoring work addresses according to the sub districts of Cheetham. Of the 12 cases, 7 were in Strangeways, 5 were in Red Bank and none were in semi-rural Cheetham Hill.

2.2 Comparison between Jewish and non-Jewish households within Red Bank

As in previous chapters, detailed analysis was undertaken of the Red Bank area by looking at all Jewish and non-Jewish households in the district rather than only those in 'Jewish' streets. The population of Red Bank was about 12,700, with the Jews constituting only a quarter of the total population in the area.

If we look only at Red Bank, we find very similar findings to those for Manchester as a whole. Table 2.1 shows the result of analysing the incidence of the top 10 Jewish occupations amongst all non-Jewish households in Red Bank (including both 'Jewish' and 'non-Jewish' streets). We see that of all the Jewish heads, almost 60% are in the top 10 groups. In contrast, only 8% of the non-Jewish heads of household in the Red Bank area are in the top 10 Jewish occupations. We see that the non-Jewish population does not concentrate in the same occupations as the Jews, by a rate of eight-fold (8% of non-Jewish heads are in 'Jewish' occupations as compared with 60% of Jewish heads). The only significant 'Jewish' occupations amongst the non-Jewish heads are those of tailor, commercial traveller and merchant. Indeed, there are some occupations which have almost no cases amongst non-Jews, such as pawnbroker and glazier. Taking account of the considerably higher number of non-Jewish households (around 3 times the number of Jewish households), this finding is significant and suggests that the immigrant Jews of Manchester were concentrated in a different spread of occupations than their immediate neighbours.

Table 2: Comparison between Jewish and non-Jewish common occupations, Red Bank³		
2.1 Common Jewish occupations		
OCCUPATION	Jewish incidence (% all J. heads, lodgers/boarders, n=436)	non-Jewish incidence (% all non-J. heads, lodg/boarders, n=1174)
1. cabinet maker	5 (1.1%)	12 (1.0%)
2. cap maker/manufacturer	18 (4.1%)	4 (0.3%)
3. commission agent	6 (1.4%)	4 (0.3%)
4. glazier	43 (9.9%)	2 (0.2%)
5. jeweller or watchmaker	16 (3.7%)	3 (0.3%)
6. merchant/shipping merchant	14 (3.2%)	11 (0.9%)
7. pawnbroker	3 (0.7%)	<i>no cases</i>
8. tailor	113 (25.9%)	31 (2.6%)
9. commercial traveller*	31 (7.1%)	24 (2.0%)
10. waterproof maker	8 (1.8%)	4 (0.3%)
TOTAL	<u>257 (58.9%)</u>	<u>95 (8.1%)</u>

* traveller refers to travelling salesman, and does not include 3 hawkers or costermongers amongst Jewish heads and 2 amongst non-Jewish heads. By 1881 this trade, which had been common amongst Jews in earlier censuses, was starting to become less common.

In order to arrive at a full picture, Jewish occupation analysis in the Red Bank area was also looked at from the angle of the non-Jewish occupations. Having categorised all non-Jewish occupations it was found that for this group there were 377 occupation groups (compared with 190 for Jewish heads). In contrast with the Jewish heads, the non-Jewish heads were spread much more evenly over the range of occupations (see table 2.2); the top 10 non-Jewish occupations were common amongst only 30% of non-Jewish heads, in comparison with 60% for Jewish heads in top Jewish occupations. (It should be noted that taken alone, having almost a third of the population in only 10 occupations is significant in itself and suggests that non-Jews within the Red Bank area were also occupied within a relatively narrow band of occupations.) The ten most common non-Jewish occupations were, in descending order of incidence for all heads in Red Bank: tailor; labourer; boarding house keeper; salesman/shopkeeper; joiner; housekeeper; publican; warehouseman; fruiterer/greengrocer; printer/compositor.

Analysis was then undertaken to see what percentage of Jewish heads of household in the Red Bank area worked in the ten most common occupations amongst the non-Jewish population⁴. The result of this analysis can be seen in table 2.2. Firstly we see that of the top 10 non-Jewish occupations only tailoring is common amongst both groups. Further, we see that over 30% of the Jewish heads are in similar occupations to those of the non-Jews and that this proportion is even greater than that held by non-Jewish heads. However, this finding is distorted by the large number of Jewish tailors - almost 26% of all Jewish heads. If we exclude tailoring we find that the total percentage of Jews in top-10 non-Jewish occupations is just over 5%. In other words, only 1 in 20 Jews worked in the top 10 non-Jewish occupations.

³These figures are based on analysis of Jewish and non-Jewish household heads in all the streets of Red Bank, within a computer file.

⁴See note above.

Table 2: Comparison between Jewish and non-Jewish common occupations, Red Bank		
2.2 Common non-Jewish occupations		
OCCUPATION	Jewish incidence (% all J. heads, lodgers/boarders, n=436)	non-Jewish incidence (% all non-J. heads, lodgers/board, n=1174)
1. fruiterer/greengrocer	1 (0.2%)	21 (1.8%)
2. housekeeper	5 (1.1%)	24 (2.0%)
3. joiner	2 (0.4%)	28 (2.4%)
4. labourer	1 (0.2%)	44 (3.7%)
5. boarding house keeper*	6 (1.4%)	26 (2.2%)
6. printer/compositor	no cases	14 (1.2%)
7. publican ^	2 (0.4%)	24 (2.0%)
8. salesman/shopkeeper	4 (0.9%)	28 (2.4%)
9. tailor	113 (25.9%)	23 (1.9%)
10. warehouseman	2 (0.4%)	23 (1.9%)
TOTAL	136 (31.2%)	255 (21.7%)

* includes lodging-house keepers and hotel keepers

^ includes restaurant keepers, beer-house keepers and beer sellers

2.3 Comparison between Jewish and non-Jewish households in Manchester overall

In order to get a picture of the occupation distribution of the city as a whole, analysis was undertaken of occupation distribution for the municipal area of Manchester, based on the 1881 census reports⁵. This analysis differs from that above, which only looked at occupations in all streets in Red Bank; whereas here analysis was done for the entire population of Manchester. The data on the number of Manchester inhabitants in each occupation were derived from ‘Census of England and Wales: ages, condition as to marriage and birthplaces of the people’, from which data were extracted on the occupations of males only. The reason male occupations were used was in order to enable comparison with the Red Bank data, which dealt only with heads, lodgers and boarders (who were mostly male), as explained in the introduction to this chapter.

Analysis of the census returns for the city of Manchester shows that in all there were 377 occupation groups in the city for the population as a whole as compared with 190 Jewish occupation groups for Red Bank. Table 3.1 shows the ‘Jewish’ occupations as they appear in the Manchester census summary, since the ‘Census of England and Wales: ages, condition as to marriage and birthplaces of the people’ sometimes included several occupations under one heading (for example 2048 is the total number of cabinet makers and French polishers together). The equivalent top-ten occupation is highlighted in bold. In other words, the number of people in ‘Jewish’ occupations listed below might have been smaller in reality since the numbers in the census summary included more than one occupation in some cases. Table 3.1 suggests that the 10 most common Jewish occupations, which constitute 60% of all Jewish heads of household, were common amongst only 19.5% of the male working population of Manchester as a whole, based on the estimated figure for all males in Manchester: 105,591⁶.

⁵ See Her Majesty’s Government (1883), pp. 355-362.

⁶This figure is based on the total male population for Manchester: 163,406 less the total number of males in the ‘Unoccupied Class’, which included: male children: 22,681 and male ‘Persons returned by Property, Rank, &c., and not by special occupation’: 35134 = 105,591. Figures from Her Majesty’s Government (1883), pp. 355-362.

Table 3: Common Jewish Occupations⁷	
3.1 Analysis of incidence for all male working population of Manchester	
OCCUPATION	NO. CASES MALES ONLY (n=105,591)
cabinet maker , French polisher	2048
hatter , tailor , dressmaker, milliner, hosier, etc.	6570
bill discountor, broker , finance agent, insurance	545
painter, glazier	2114
goldsmith, jeweller	190
merchants , commercial traveller , brokers	8117
shopkeeper, dealers, pawnbrokers , etc.	809
waterproof goods	189
TOTAL:	<u>20582</u> (19.5% of all males)

In conclusion, we find that the top ten occupations for Jews are not typical for the population of Manchester as a whole, even when they are included with other similar occupations (such as the case of cabinet makers, whose numbers are inflated to include French polishers). In other words, not only when compared with their neighbours within the Red Bank district, but when compared with the city overall, the Jews of Manchester were occupied in a different spread than the population of the city as a whole.

In order to check this finding further, analysis was also made of the incidence of the top non-Jewish occupations within Red Bank, for Manchester as a whole. Table 3.2 lists the 10 most common occupations amongst the non-Jews of Red Bank. The occupations are listed according to their entries in the census summary with the equivalent top-ten occupation highlighted in bold.

Table 3: Common non-Jewish Occupations⁸	
3.2 Analysis of incidence for all male working population of Manchester	
OCCUPATION	NO. CASES MALES ONLY (n=105,591)
milk seller, baker, grocer etc.	5705
warehouseman	3487
cook, housekeeper , etc.	244
builder, plumber, joiner , etc.	7972
general labourer , stoker, mechanic, machine worker	9762
innkeeper , publican etc.	703
bookseller, publisher, printer	2114
shopkeeper , dealer, etc.	809
hatter , tailor , etc.	6570
TOTAL:	<u>37366</u> (35.4% of all males)

Table 3.2 suggests that whereas Jewish occupations (within Red Bank) were typical of up to 20% of the population of Manchester as a whole, non-Jewish occupations (within Red Bank) were typical of over 35% of Manchester as a whole. In other words, non-Jewish occupations within Red Bank were much more representative of the city overall (although still did not represent the full occupational spread).

This section has shown that historical contentions regarding the concentration of the Jews of Manchester in a narrow band of occupations can be proven by the census data of 1881. It has also shown that the concentration into a narrow band is not typical of the non-Jewish population of the Red Bank district, who worked in a wider and more representative spread of occupations.

⁷ Unlike table 2, which only looks at Red Bank figures, these figures are based on Her Majesty's Government (1883) and a computer file which analyses occupations for all households in the census.

⁸ See above comment.

3. Analysis of Industrial Categories

The following section looks at the distribution of occupations for the Jewish population by the Cambridge Group classifications. The Cambridge system categorises occupation by the *commodity concerned* and contains 27 categories which cover 6 main areas: Professional; Domestic; Commercial; Agricultural; Industrial; Unoccupied. Where Cambridge categories do not appear (such as agriculture), they were not applicable to any of the occupations of the Jewish heads of household.

Whereas in the previous section, the common occupations for Jews versus non-Jews were studied, the purpose of the analysis in this section is to investigate occupations according to occupational category, in order to ascertain whether, when defined by commodity, the occupations of the Jews of Manchester were measurably different from the general population.

Analysis was undertaken of all Jewish heads of household in Red Bank and further analysis was made to compare Jewish heads with the population of Manchester overall.

3.1 Analysis of occupation by the Cambridge Classification System

• Analysis of Jewish households in Manchester overall

Figure *a* below, shows the frequency distribution of Cambridge categories for all Jewish heads, boarders and lodgers in Manchester. It shows that the largest group by far is that for 'Industrial', which includes people dealing and working with a range of commodities; these comprise over 87% of all Jewish heads. The majority of 'professionals' were lawyers, physicians, architects and accountants. 25% of the 12 categorised as 'Domestic' include synagogue beadles. 'Commercial' includes commercial clerks, and other people in finance occupations. The 'Unoccupied' category is mostly comprised of people with independent means.

Figure *a*: frequency distribution of Jewish occupations according to Cambridge classifications: in all Manchester.

Pie Chart for Cambridge summary categories

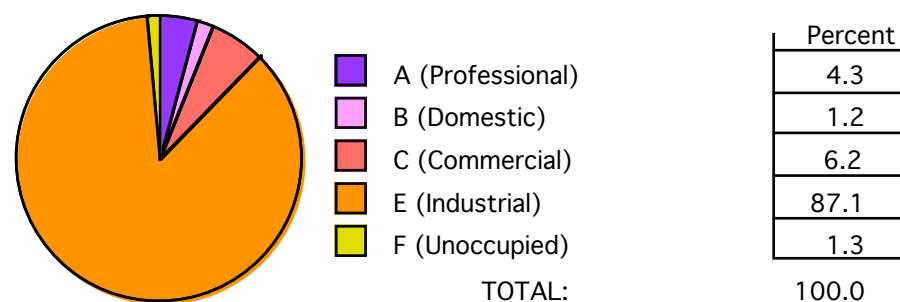
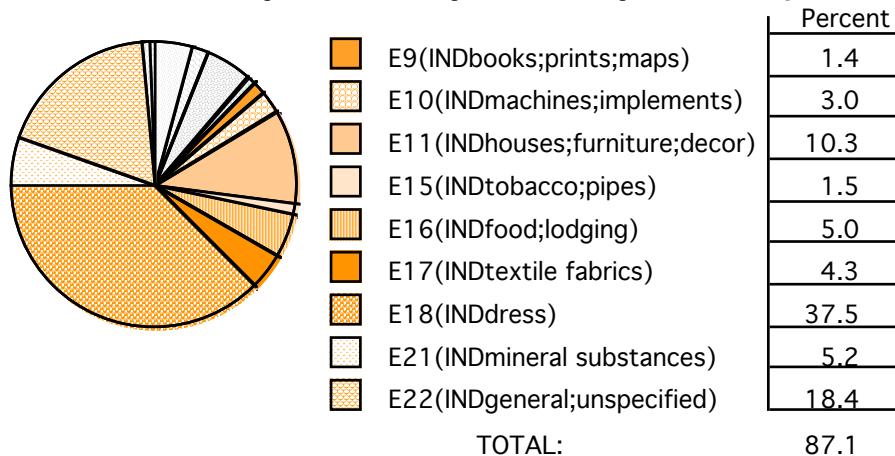


Figure *b* below shows a frequency distribution of detailed Cambridge categories, only showing the breakdown of the 'industrial' categories. We see that the largest commodity dealt with is dress (of which most are in the tailoring industry) and the next largest is houses, furniture and decor, which reflects a high percentage of Jews in the glazing trade.

figure b: frequency distribution of Jewish occupations according to Cambridge detailed classifications, all Manchester. (Portions coloured orange are industrial occupations; all others are coloured grey).

Pie Chart for Cambridge detailed categories (showing industrial only)

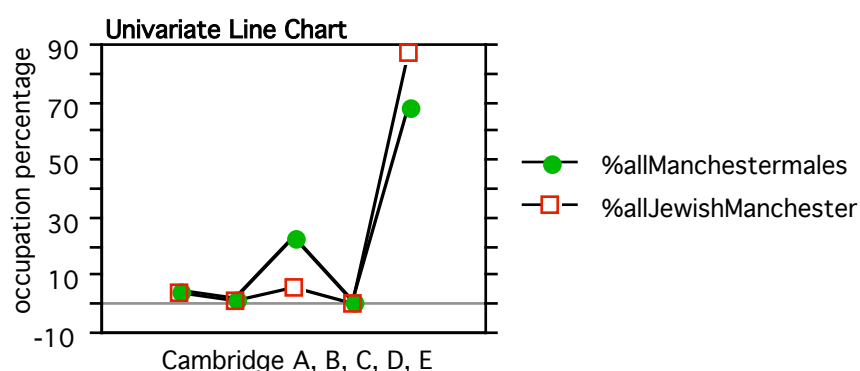


• Comparison between Jewish and non-Jewish households in Manchester overall

Another comparison was made by looking at the occupations for Manchester inhabitants as a whole. The census report provided the total number of people in each of the Cambridge categories and these were compared with the figures for Manchester Jews.

We see in the line chart in figure c below a comparison between the two groups, looking at the summary categories of the Cambridge system, represented as a percentage of the total population for each group. As was explained in the previous section, the figures for all males in Manchester in figure c below, were taken from census summaries⁹, in order to compare with Jewish occupations of heads, sole boarders and lodgers, who were mostly male.

Figure c: line chart comparing Cambridge summary classifications for all inhabitants of Manchester with all Jews in Manchester



We see in figure c that the proportions of the Professional occupation (group A) are similar: 3% for all Manchester, 4% for the Jewish population. The Domestic occupations (group B) are greater for the all Manchester population: 2% for all Manchester, 1% for the Jewish population. The proportions for Commercial occupations (group C) are quite different: 23% for all Manchester, 6% for the Jewish population. The proportions for the Agricultural occupations (group D) are 1% for all Manchester and none at all for the Jewish population; this may suggest that the Jewish population is slightly more urbanised than average. The proportions for the Industrial occupations (group E) are quite dissimilar, however, with 69% for all Manchester, 87% for the Jewish population. The breakdown of sub-categories below helps explain these findings further.

⁹From Her Majesty's Government (1883).

Figure *d* below compares the breakdown between Jewish heads and the whole population of Manchester, looking at the sub-categories of the Cambridge classification system, using a bivariate scattergram:

Figure *d*: scattergram of proportions of all male inhabitants vs. proportions of all male Jewish heads, sole boarders and lodgers, in Manchester, Cambridge classifications.

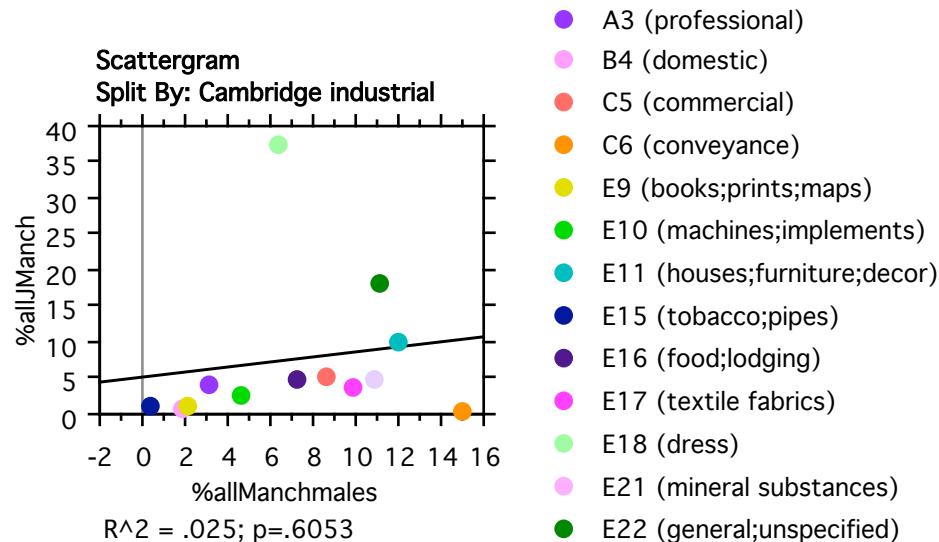


Figure *d* above highlights the fact that there were certain industries in which the Jewish population is over-represented, whilst in others it was underrepresented. In the former group, we find the industries of: E18 dress and E22 general. This is especially the case for dress - which reflects the predominance of tailoring as a core Jewish enterprise in the city as a whole and not only in the Red Bank area. Under-representation is found in nearly all other occupations, especially C6 (conveyance) and E17 (textile fabrics). The under-representation of the latter occupation is a finding which may reflect historical analysis which suggests that the Jews were underrepresented in the cotton industries, except for trade (as suggested in chapter 4). The predominance of foreigners in general and Jews specifically in the trading of cotton goods is explained by Pollins (1982) as being due to the relative riskiness of the market at the time. He also confirms the findings on relatively few Jewish mill owners: 'The Jews in the cotton industry were mainly, but not entirely, export merchants'¹⁰. The reputation of Manchester as the 'international emporium for cotton goods'¹¹ is verifiable by re-examining the occupation records for All Manchester. The records show that the occupations defined as 'textile fabrics: working & dealing in: cotton & flax' constitute the largest single group of occupation (besides undefined occupations) for the general population of Manchester, in all - 9.5% of the working population of Manchester (males and females together), 6.6% of working males only, were employed in the cotton industry.

4. Analysis of Household Structure

We saw in the previous chapter in the analysis of household structure that in sharing households, Jews were twice as likely to share with someone from the same country as non-Jews. The following analysis looks at the incidence of identical occupations for second head or lodger as opposed to identical country of origin in order to see to what degree are migrants likely to lodge with people from the same occupation. The purpose of this analysis is to test the question of co-dependence in the Red Bank district; and also to see whether this is a specifically Jewish phenomenon or one common to all immigrants.

4.1 Analysis of Jewish households in Manchester overall

Figure *e* below is a set of histograms which show the result of analysis of all Jewish heads in Manchester who lived in shared households, of whether the head of household had the same occupation as boarders,

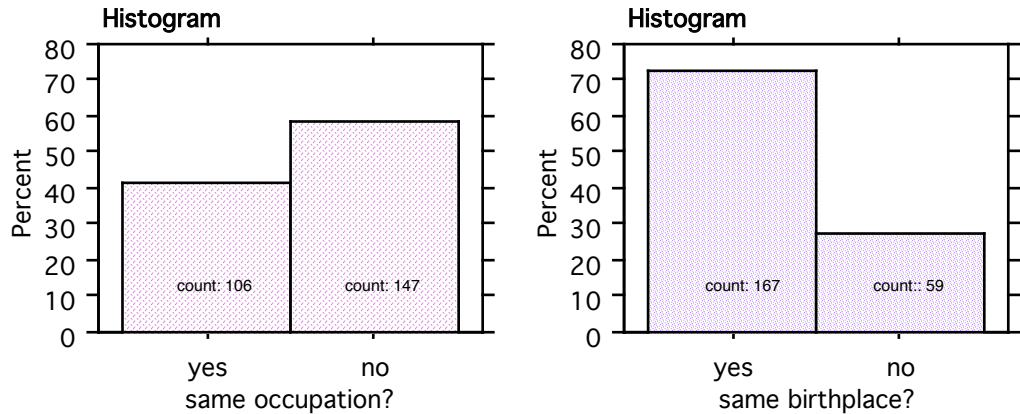
¹⁰See Pollins (1982), p. 93.

¹¹See op. cit., p. 93.

lodgers or second heads of household at the same address (left) and whether the head of household was born in the same country as boarders, lodgers or second heads of household at the same address (right). The question of sharing occupation was such that if there were more than one boarder or head, only one case of matching occupation was sufficient in determining that boarder and head had the same occupation. The birthplace was only compared in cases where the head was born abroad.¹²

We see that of the two questions, whether occupation or birthplace are stronger determinators of co-residence, that birthplace comes out much more strongly, with over 70% of households with co-residents coming from the same country of origin, whilst only 42% of households with co-residents share the same occupation.

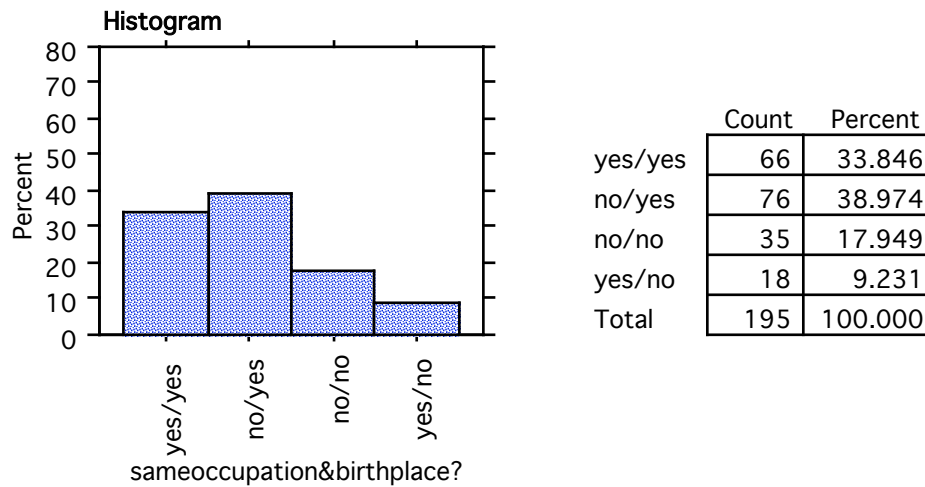
Figure e: frequency distribution of Jewish sharing heads who have same occupation or same birthplace as boarder, lodger or second head.



In figure f below we see further analysis in which cases where occupation and birthplace both applied were analysed to see if households where occupations were shared by head and co-residents were also households where birthplace was shared by head and co-residents. We see in the histogram and table below that the highest incidence, 39%, is for cases where occupation was not shared, but birthplace was; and the next highest incidence, 34%, is of households where both birthplace and occupations were shared. (There were additional cases where only occupation was comparable, since the head was born in Britain or where only birthplace was comparable, since the occupation was not cited for the head). The smallest group is those that share occupation but not birthplace. Considering the small number of occupation types amongst the Jews, this finding suggests that birthplace was a much stronger determinate of co-dependence.

¹² See appendix for explanation of this analysis.

Figure f: frequency distribution of Jewish sharing heads who have same occupation and same birthplace as boarder, lodger or second head.



4.2 Comparison between Jewish and non-Jewish households within Red Bank

Analysis was also undertaken just of the Red Bank area, which contained the majority of sharing households, in order to see how different the Jewish residents were from their non-Jewish neighbours. The results comparing Jewish and non-Jewish households can be seen in table 4.1. This table shows that the proportion of boarders sharing the same trade or occupation as the head of household is twice the rate for Jewish households as for non-Jewish households. We also see that the proportion of boarders coming from the same country of origin as the head or wife (which was calculated only for cases where the head or wife were born abroad) is also 2.4 times greater amongst Jewish households than amongst non-Jewish households. The latter finding was reported in the previous chapter and is given here for illustration purposes.

Table 4: Summary of frequency distribution of 'same occupation?', 'same birthplace?'		
4.1 Comparison of percentages for Red Bank between Jewish and non-Jewish heads		
	same occupation?	same birthplace?
Jewish households in Red Bank	yes: 37%	yes: 71%
non-Jewish households in Red Bank	yes: 18%	yes: 30%

Comparison was also made between the Jewish and non-Jewish households within Red Bank of the incidence where both occupation and birthplace were shared between boarders and heads. Table 4.2 shows the results for comparing Jewish and non-Jewish households within the area. We see that the proportion of households with boarders which share both occupation and country of origin with the head is almost 4 times greater amongst Jewish households than non-Jewish households. We also see that cases where different occupation but same birthplace occurred were 1.5 times greater in Jewish households than non-Jewish households. Both Jewish and non-Jewish households had similarly low proportions of cases where same occupation, but different birthplace occurred. It is important to recall that birthplace measures were made only for cases where heads or wives had been born abroad.

Table 4: Summary of frequency distribution of 'same occupation and birthplace?'			
4.2 Comparison of percentages for Red Bank between Jewish and non-Jewish heads			
	same occupation and birthplace?	other occupation, same birthplace?	same occupation, other birthplace?
Jewish households in Red Bank	yes: 30%	yes: 39%	yes: 9%
non-Jewish households in Red Bank	yes: 8%	yes: 26%	yes: 10%

In summary, the theory that co-residents are more likely to lodge or share house with people from the same country than people sharing the same occupation seems to be correct, although the latter also occurs to a significant degree. Moreover, non-Jews are more likely to share with a person from the same country of

origin than from the same occupation. When comparing both together, around 35% of Jewish cases come both from the same country of origin and from the same occupation and a similar proportion share birthplace, but not occupation. In the case of non-Jews, although significant number of cases do occur, these are at a much lower rate than amongst Jewish residents.

An additional analysis was done to compare non-Jews within Red Bank with non-Jews in the rest of the city, to see if the sharing of occupations in Red Bank was a phenomenon more related to 'Jewishness' or to location in the area.

Table 4: Summary of frequency distribution of 'same occupation?'		
4.3 Comparison of percentages for outside of Red Bank between Jewish and non-Jewish heads		
	same occupation?	same birthplace?
Jewish households outside of Red Bank	yes: 35%	yes: 54%
non-Jewish households outside of Red Bank	yes: 11%	yes: 22%

Table 4.3 shows that the rates of Jews outside of Red Bank who shared the same occupation as boarders, lodgers and co-heads are very similar to within the Red Bank district- 35% as compared with 37%; the shared birthplace rate for Jews is lower outside of the Red Bank district, 54% rather than 71% in Red Bank, suggesting that language or cultural co-dependence is a factor more important in the area of initial settlement, Red Bank. For non-Jews the 'same occupation' rate is higher within the Red Bank district, 18% as compared with 11% as is the same birthplace rate: 30% as compared with 22% outside of Red Bank. In conclusion we find that although the actual rates are lower when comparing Jews to non-Jews, the factors of co-dependence are consistently higher within Red Bank and generally the differences are greater for non-Jews - co-dependence is on average 50% higher within than without Red Bank for non-Jews and only 30% higher for Jews (although this could be interpreted as meaning that co-dependence continues to be important outside of Red Bank for Jews and less so for non-Jews).

5. Analysis of Spatial Distribution of Jewish Work Addresses

5.1 Spatial Analysis of Work Addresses

The purpose of this analysis is to study the distribution of Jewish occupations in contrast with those of their neighbours within Red Bank and in contrast with the city overall - in order to investigate whether the Jews of Manchester clustered by trade. As explained in the literature review, theories on migration patterns propose that clustering according to occupation is an indication that immigrants are using the trades learned in their country of origin. According to Pryce, 1994, this is a theory which ties in with the 'chain migration' model of migration; due to the fact that in this form of migration the sources of information are mainly based on personal contact.

Analysis of work addresses was made based on the information from business directories compiled in the data-base (see chapter 3). The sample represents a wide range of occupations since, as stated by Williams: 'The trade directories were published commercially for sale, so the people listed did not pay for their entries. Therefore some quite small businesses are listed'.¹³

Information was available on 225 heads of household: 32% of which (73) had work addresses identical to their home addresses; and 68% of which (152) worked at a different address from home. This information comprised a sample of 21% of all Jewish heads of household in Manchester (which totalled 1086 heads). The sample was increased by a further 24 cases, where other members of household were linked to work addresses. These included 1 undefined, 11 boarders and lodgers, 1 daughter, 1 sister-in-law, 6 sons, 2 sons-in-law and 2 wives. Of the additional cases 1 shared home and work addresses and the remaining 23 did not.

Taking all 249 cases into consideration: 30% (74) had work addresses identical to their home addresses; 70% (175) worked at a different address from home. In summary, all available information on the location of work places for Jewish residents in Manchester comprised 21% of a sample of 1171 Jewish households (including sole lodger households) and thus constitute a reasonable sample.

¹³Williams (1997), in a telephone conversation with the author about his methodology.

Following is a breakdown by district of all the percentages of households which had work addresses identical to their home addresses. It is notable that whilst on average, 30% were identical, if we look at the cases by district (ignoring Moss-Side and Salford which had very few cases), we see that central Manchester and Cheetham both have over 35%, whilst Broughton and Chorlton only have around 10%. It could be suggested that the former two districts have in common a lower economic status along with a greater proportion of work addresses overall. In other words, Jewish families may be more likely to ‘live above the shop’ when they are not yet economically established. However, another explanation of this finding could be that the type of industries prevalent in these areas (small workshops in Cheetham and retail establishments in both districts) has a greater propensity towards a sharing of work and home premises.

Table 5: Percentage of households where work and home are at the same address ¹⁴	
DISTRICT	PERCENTAGE
central Manchester [n=15]:	35%
Broughton [n=30]:	10%
Cheetham [n=124]:	38%
of which in Red Bank (n=66):	35%
of which in Strangeways (n=18):	72%
of which in Cheetham-Hill (n=40):	18%
Chorlton [n=54]:	11%
Moss Side [n=4]:	0
Salford [n=3]:	100%

5.2 Spatial Analysis of Work Addresses According to Industrial Categories

This section analyses business addresses according to the classification system proposed by Armstrong. Unlike the Cambridge system, used in the analysis up to now, which classifies occupations according to the commodity concerned, Armstrong’s system classifies occupation by *function and industry* and contains 14 categories which break down into 8 principle areas: Agriculture and Fishing; Building; Dealing; Domestic Service; Manufacturing; Other occupations, including independent means; Public and Professional; Transport. The key difference is that in the Armstrong system, a tailor and dress shop would come under the same category of Manufacturing: dress, whilst in the Cambridge system, the tailor would be classified as Manufacturing and the dress shop as Dealing (retail).

Plate 22 shows the geographical distribution of Armstrong categorised occupations, set on a background of work addresses coloured in thick grey lines (the dots associate business addresses with the relevant axial line, but not with the precise street location). Where business information was found for two addresses, both of these were shown on the map.

- We see that the majority of work addresses are in central Manchester, although a significant amount are also in the Cheetham area north of the railway lines.
- It is also notable that outlying streets carrying dealing occupations tend to be the routes leading out from the centre - a phenomenon well documented for industrial cities in general - whereby the development of businesses tends to be along integrated routes.

¹⁴Occasionally business and home addresses were found to be at different house numbers on the same street. Such cases were considered as being ‘at the same address’.

- We also find that transport occupations are located in the central area, in proximity to the railway terminals and canals. The notes on the reproduction of the Ordnance Survey map of central Manchester confirm that this distribution reflects historical information about the area: 'Although the centre of Manchester was devoted to commercial activity, around the fringes were many factories and workshops. These tended to be located on the banks of the rivers and canals, where water could be obtained and, in the case of those on the banks of canals, which could be used for transporting raw materials and finished products.'¹⁵

5.3 Spatial Analysis of Work Addresses by Integration Values

We saw in the previous chapter that Jewish work addresses taken together, were significantly more spatially integrated than the model as a whole. Table 6 below shows the distribution by each work category separately¹⁶.

Table 6: Summary of Mean Spatial Values Per Occupation Category					
Comparison of Jewish work addresses summarised by Armstrong occupation categories with model as a whole, using t-tests ¹⁷					
	GLOBAL (radius n)	LOCAL (radius 3)	RAD-RAD (radius 8) ¹⁸	DEPTH FROM GLOBAL> IN MODEL ¹⁹	LINE LENGTH: PIXELS
Spatial model as a whole	1.022	2.595	1.544	7.800	21.39
Dealing	1.342	3.879	1.787	4.803	61.19
	p<.0001	p<.0001	p<.0001	p<.0001	p<.0001
Manufacturing	<u>1.233</u>	3.566	1.702	<u>6.039</u>	65.00
	p<.0001	p<.0001	p<.0001	p<.0001	p<.0001
'Other'	1.283	3.825	1.738	5.529	71.93
	p=.0007	p<.0001	p=.0005	p=.0005	p=.0025
Public and Professional	1.251	3.745	<u>1.697</u>	5.562	<u>57.22</u>
	p=.0407	p=.0241	insignificant	p=.0391	p=.0278
Transport	1.373	<u>3.513</u>	1.756	3.600	58.655
	p=.0003	p<.0001	p=.0015	p=.0005	p=.0041

We see that the occupation with the highest global integration value is Transport and it is also the closest to the global integration core (since it has the lowest depth value), although this occupation is the least integrated locally. Dealing is the most integrated locally and according to the rad-rad model is next to the top value for global. Manufacturing has the bottom value for both global integration and depth from global core and has the next to bottom value for local integration and rad-rad integration. The category of 'other' appears on the longest streets, according to this table, but is not distinguishable from the previous categories ('other' includes various occupations - of which the largest group is finance type occupations - broker, commission agent, commercial clerk and so on - which comprise 38% of 'other'). 'Public and Professional' occupations are the least locally integrated and have quite low global and rad-rad values.

¹⁵ See Makepeace (1894).

¹⁶The statistics in this table are from a computer file which compiled statistics on Jewish households, which included analysis of occupation and work addresses per household.

¹⁷A t-test is a standard statistical test of probability and works by comparing the mean value of a group with the mean value of the population as a whole, and asking how likely it is that the mean of the smaller sample would have been arrived at by chance. 'p' values of less than 0.05 denote a result which is considered 'highly significant'.

¹⁸According to Hillier (1996) 'the effect of a radius-radius analysis is to maximise the globality of the analysis without inducing "edge effect", that is the tendency for the edges of spatial systems to be different from the interior area because they are close to the edge.' (p. 163). In this case the mean depth of the map is 7.8, so the radius-radius map shows radius 8 analysis of the spatial map of Manchester.

¹⁹Depth was calculated from the most globally integrated line in the entire spatial model.

5.4 Spatial Analysis of Work Addresses: 'intelligibility'

The following analysis looks at the correspondence between radius 8 (radius-radius) integration and local integration for all Jewish work addresses. Normally 'intelligibility' is considered as the correspondence between global and local integration. However, correlations for these did not show any significant results; since in chapter 5 it was found that radius-radius better described the global patterns of the Manchester model, due to the location of the Red Bank district near the edge of the city, this was the radius used to plot intelligibility. The analysis below looks for correspondences per districts of Manchester (as defined in chapter 5), since intelligibility is a property of street systems, rather than of individual streets.

Figure g below plots the axial values for work addresses, splitting the values per Manchester district, for business addresses of all manufacturers for whom addresses were available. Of the three districts for which there are sufficient examples, central Manchester, Red Bank and Strangeways all have a correspondence for intelligibility. This is defined as 'the degree to which what can be seen and experienced locally in the system allows the large-scale system to be learnt without conscious effort'.²⁰ Only Red Bank and Strangeways are directly comparable, since they have the same number of cases (14). Taking this into account, there are marked differences between the districts, with Strangeways having a highly significant result, central Manchester a reasonable result and in the case of Red Bank the correspondence is not very high. This suggests that of the three districts with sufficient cases of manufacturers, Strangeways and central Manchester had the best correspondence for intelligibility.

Figure g: scattergram of Jewish work addresses per district - radius 8 integration vs. radius 3 integration for Manufacturers only. (R^2 values are given only for districts with sufficient cases).

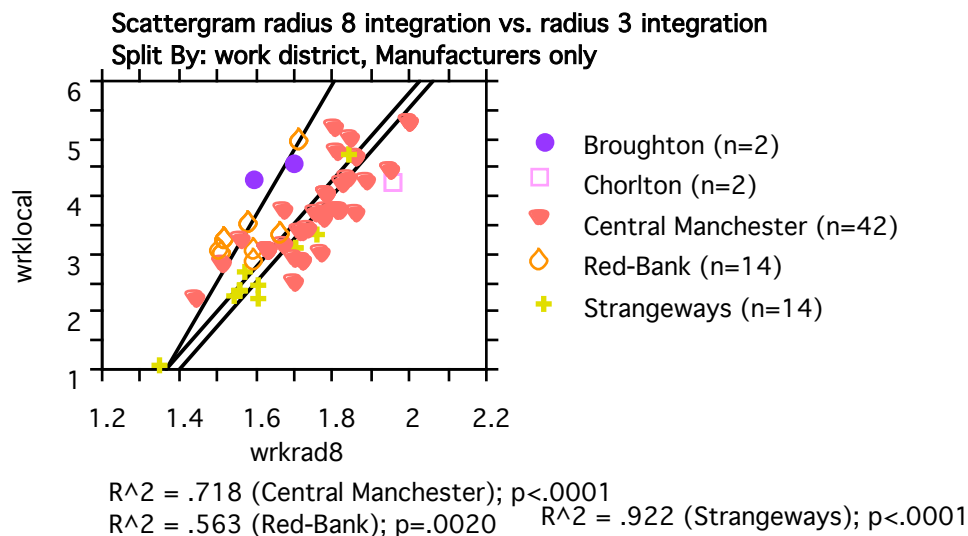
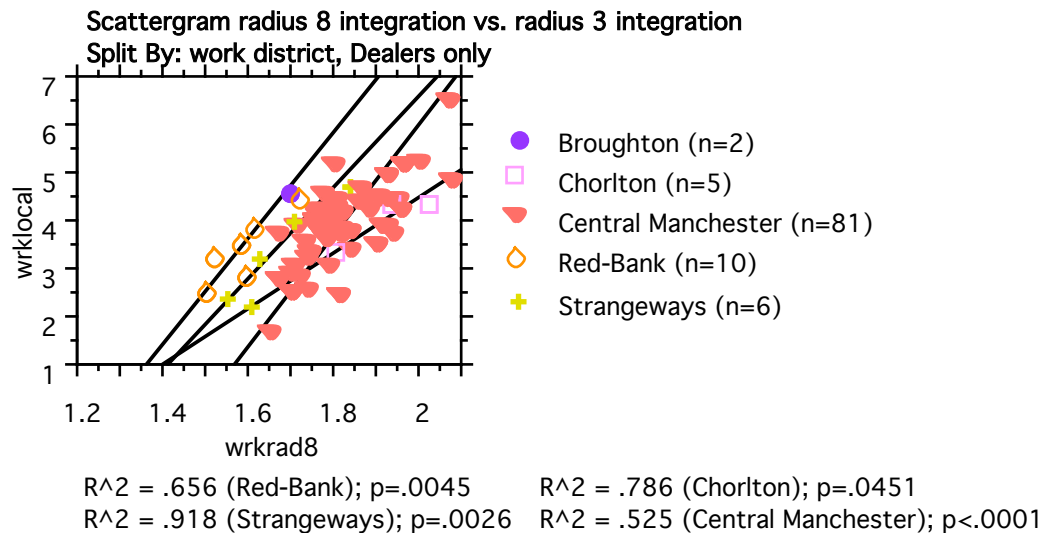


Figure h below plots intelligibility for all Dealers. Here we see that central Manchester, Strangeways and Red-Bank and Chorlton all have a correspondence between radius 8 and radius 3 integration. Only Strangeways and Red Bank are directly comparable since they have a similar numbers of cases. Again Strangeways is the district with the strongest correlation (although with 5 cases this is not very significant) and both Chorlton and Red Bank have reasonable correspondences. Central Manchester has a correspondence although this is not highly significant.

²⁰ Hillier (1996) p. 214.

Figure h: scattergram of Jewish work addresses per district - radius 8 integration vs. radius 3 integration for Dealers only. (R^2 values are given only for districts with over 5 cases).



The other Armstrong categories did not have a sufficient number of cases to allow this analysis. In summary, the analysis for intelligibility has suggested that Jewish work addresses tend to be located in street systems with a strong local to global pattern and that in the case of Strangeways the case is especially significant.

6. Analysis of Distance Between Work and Home Addresses

The purpose of this analysis was to examine whether there was a spatial pattern of proximity between work and home addresses.

Plate 23 shows all home addresses which were associated with a different work address, coloured up by mean depth from home to work, where the warmer the colour the more proximate the work and home addresses. Depth was calculated by taking each home address and calculating the step depth from it to the work address of the business owner in question. In cases where more than one work address was given for a home address, mean depth for both was calculated²¹. If a home street was associated with more than one work address, the lower depth value was used for colouring up the drawing.

- We see that the north part of Chorlton contains many of the addresses close to work; which goes along with the background on the area given earlier, which said that this area was settled by many people who worked in central Manchester, who wanted to remain close to work.
- We also see that many of the streets in Cheetham are relatively close to work and this probably indicates that the Jewish families here tended to work in the workshops close to home, since earlier analysis has shown that Cheetham was axially distant from the principle working area of central Manchester. Moreover, plate 4, shown in chapter 4, has indicated that many of the addresses which were both work and home addresses (coloured turquoise) were located in this area.

²¹See notes on 'census1881distancework' in the appendix, for explanation of this measure.

- The more distant reaches of Chorlton, in the south-east of plate 23 are shown to be relatively distant from work, this suggests that many of the people working there maintained businesses in central Manchester yet could afford housing and the cost of commuting from, the upper middle-class areas of Victoria Park and south Chorlton.

Table 7.1 shows a statistical analysis of the significance of the findings displayed in plate 23, summarised per area. This table suggests that the axial step depth from home to work for addresses in Cheetham is significantly smaller than average (as mentioned above, Cheetham contains a large number of work addresses despite being axial distant from central Manchester); if Cheetham is broken up into its three sub-districts, we find that the addresses with the least distance from home to work are in Strangeways, with Red Bank in second place and the semi-rural district of Cheetham-Hill has the addresses the farthest from the work-place. Central Manchester has close to the average distance for all the work addresses. This may be a factor of the location of most work addresses in this district, but may also be due to the small number of cases in this instance. Similarly, Broughton, Moss Side and Salford are also not dissimilar from average. In the case of Broughton, which has a large number of cases, it may be its proximity to Cheetham, which contained many work addresses, that explains this result. Lastly, Chorlton in the south is significantly more distant from work addresses than average. Considering that Chorlton was the area settled most recently to 1881 and could therefore be defined as the key area of secondary settlement of the Jews, this finding seems to be of significance.

Table 7: Summary Table of Average Distance between Home and Work per Area		
7.1 t-tests comparing area means to mean depth from Jewish homes (-6.279); range -1≤-13.5.		
area	sample mean	p-value
central Manchester [n=3]:	-6.111	insignificant
Broughton [n=23]:	-6.521	insignificant
Cheetham [n=82]:	-5.662	.0196
comparison for Red Bank (n=44):	-5.200	.0015
comparison for Strangeways (n=9):	-3.667	.0034
comparison for Cheetham-Hill (n=29):	-6.983	insignificant
Chorlton [n=46]:	-7.403	.0080
Moss Side [n=5]:	-5.200	insignificant
Salford [n=6]:	-6.500	insignificant

A similar type of analysis was undertaken to see if there was a pattern of distribution from work addresses to home addresses, see table 7.2 and plate 24, where the warmer the colour the more proximate the work and home addresses. The difference between this measure and the above is that in this case the distance from work to home was averaged out across a work street for several home addresses, whilst above the analysis looked at distance from home to work averaged out across a home street for several work addresses. There were of course cases where a work street only had one home address associated with it, so it had the same distance value as above.

Table 7: Summary Table of Average Distance between Home and Work per Area		
7.2 t-tests comparing area means to mean depth from Jewish businesses (-6.300); range -1≤-13.5.		
area	sample mean	p value
central Manchester [n=133]:	-6.697	.0345
Broughton [n=5]:	-2.400	.0029
Cheetham [n=25]:	-5.007	insignificant
comparison for Red Bank (n=14):	-5.655	insignificant
comparison for Strangeways (n=9):	-4.056	"
comparison for Cheetham-Hill (n=2):	-4.750	"
Chorlton [n=7]:	-3.929	.0527*
Moss Side [n=3]:	-9.167	insignificant
Salford [n=5]:	-7.700	insignificant

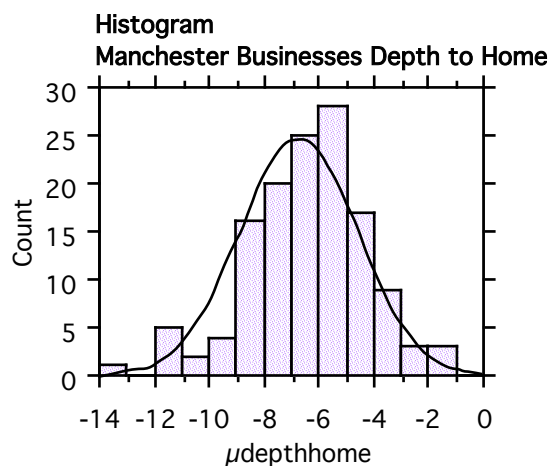
* marginally insignificant.

Table 7.2 shows that when considering the work addresses of the 6 districts which can be associated with Jewish home addresses, central Manchester has the most work addresses, which is not surprising considering this was the central business district of the time. Cheetham also has a significant number of work addresses and has a below average (but statistically insignificant) score for distance from home;

taking the three sub-districts of Cheetham, Red Bank work addresses tend to be the most distant from the home addresses associated with them. This is surprising until we recall that this analysis only considered cases where home and work was not shared. This suggests that in such cases, Red Bank business were owned by people living at a relatively long distance away. Of the other groups, which contain only a handful of cases each, 3 are close to average and only Chorlton shows a (marginally insignificant) smaller distance from work to home than average. This finding suggests that of the few work addresses contained in Chorlton, these served inhabitants of the area itself and did not attract commuters from other areas. On the other hand, analysis of table 7.1 above showed that the residents of Chorlton who did work outside of the area, travelled the longest distances of all. The results for Broughton are similar to those of Chorlton, although the results are not statistically significant.

The results for central Manchester are somewhat surprising, since we see that the central district of the city has, on average, the largest distance between work and home. However, this result should be viewed in the light of the fact that central Manchester contains both the most distant and the most proximate work addresses. We see in the histogram in figure *i* below of the breakdown of all depth from work to home for central Manchester work addresses, the largest amount of cases are clustered around the -6 mark with more or less equal distribution around -7, -8, -9 on the one hand, -5 and -4 on the other. This finding suggests that as the business district (with a small Jewish population in its own right), central Manchester served Jewish families from all parts of the city.

Figure i: frequency distribution of the mean axial depth from all Manchester work addresses to the home addresses associated with them.



7. Analysis of Pattern of Employment

The question of social class was looked at in depth in the previous and opening chapters. It was noted there that in the case of heads of household in the manufacturing and dealing trades who employed more than one person, their social class was elevated to class II²². Employers of more than 25 people were elevated two classes - to the top, professional class I. However, this system does not account for other trades with large number of employees - in the case of Manchester this was most prevalent amongst the building trades (in which few Jews were employed, other than jobbing glaziers). In order to quantify this factor and also in order to seek further understanding on the difference between occupational distribution amongst the Jews and their neighbours in Red Bank, further analysis was undertaken of the question of the absolute number of employed; how many employers there were overall and also, the rate of unemployment. It should be noted that the pattern of employment evidently became a question of interest for the census takers after 1881, since by the 1891 census, the returns included a question on employment status: is the respondent 'employer, employed, neither employer or employed but working on own account' (although this was not always responded to).

7.1 Analysis of employment status

Analysis of employment status was undertaken within the Red Bank area of the Jewish and non-Jewish households (including those in streets with non Jews at all) by counting the number of heads whose occupation showed they were either employers or unemployed. It should be noted that these results were dependent on the consistency of the census taker; since this was not a required statement, it is possible that some cases were omitted.

The results of this analysis are given in table 8 below. This shows that the rate of 'employer' status was almost identical for both Jews and non-Jews in the area, and stood at around 2.5% of all heads. It is notable that this is a very low rate, which probably reflects the status of the area as being one of low income. Regarding the rate of unemployment, we do see a difference between Jewish and non-Jewish households - with a lower rate for the former. However, the rates are so low as to be only marginally significant.

Table 8: Summary of frequency distribution of 'employer?', 'unemployed?'		
Comparison of percentages for Red Bank between Jewish and non-Jewish households		
	employer?	unemployed?
Jewish households in Red Bank	yes: 2.3%	yes: 0.2%
non-Jewish households in Red Bank	yes: 2.7%	yes: 0.9%

7.2 Analysis of mean number of employees

Analysis was also undertaken of the mean number employed - calculated first with and then without cases where over 25 were employed. Table 9 shows the comparison of these rates between the Jewish and non-Jewish heads in the high-density area. We see here that the mean number employed, only for cases of under 25 employees, is quite similar for the two groups (although higher for the non-Jews). However, in the case of employers of larger numbers (who would be elevated to the top social class), we see a distinct difference (a t-test showed $p=.0106$) between Jewish and non-Jewish heads, whereby the mean number for the former group is around 30 and the mean number for the latter is over 80. We also see that the number of cases for large employers is greater, at 7, for the non-Jewish heads. This finding is another indication of an occupational distinction for the Jewish inhabitants of the area - although their employer rate is quite similar, they tend to employ fewer numbers than their non-Jewish heads. This finding continues the research quoted in chapter 4, regarding the lack of large-scale factories amongst Jewish manufacturers.

Table 9: Summary of mean number of employees		
Comparison of percentages for Red Bank between Jewish and non-Jewish households		
	mean employees (1<25)	mean employees (25+)
Jewish households in Red Bank	7.0 (n=8)	28.5 (n=2)
non-Jewish households in Red Bank	7.3 (n=22)	81.1 (n=7)

It should be noted that the small number of cases of over 25 employed in the Red Bank district makes the results for this group of employers statistically questionable.

8. Summary and Discussion

The previous chapter raised the question of whether the spatial and social differences found between Jews and non-Jews can be attributed to their occupational structure. This chapter has suggested that there are distinct and measurable differences in the occupational structure of the two groups, as follows:

First, it was found that the spread of occupations was much narrower for the Jewish population. It was also shown that other than the occupation of tailoring, there were no top-ten occupations common to both groups; moreover, key occupations for the Jewish population were only marginal for the non-Jewish and vice versa. Historical evidence can also show that although tailoring was an industry common to the general population as well as the Jews of Manchester, the working structures of the latter were very different; for instance the economic historian Pollins contends that the majority of Master tailors in Manchester were non-Jewish, whilst the Jews were invariably ex-salesmen who entered tailoring as businessmen rather than

²²See chapter 3, section on the industrial classifications.

craftsmen.²³ Pollins also maintains that the Jews were central to the development of mass (mechanised) tailoring, which became a niche industry when the bespoke tailoring was found to be a closed shop.²⁴ This split in the industry has also been identified by Kershner (1995), as was mentioned in chapter 4. The industry central to Manchester's economy, that of the cotton mills, was shown to be marginal to the Jewish population; except for the small numbers of Jews employed in mercantile occupations, several of whom dealt with cloth. It was also demonstrated that the non-Jewish residents of Red Bank were occupied in a far wider range of occupations than Jews, which were more representative of the occupational structure of Manchester as a whole. This suggests that Red Bank had a distinctive occupational structure for all its inhabitants, although the Jewish inhabitants worked in a quite different range of occupations than their non-Jewish neighbours.

These findings taken together suggest that theories relating to the tendency for immigrants to cluster within a narrow band of occupations, hold for the Jewish population. Moreover, the fact that the Red Bank district, which could be defined as the area of initial settlement, had the narrowest spread of industries, indicates the presence of an occupational cluster.

Further analysis sought to find patterns relating to the question of shared occupations amongst co-residents; in other words, are boarders likely to lodge with people from the same occupation. This question highlights a key concept raised by the literature review - that of occupational clusters. Analysis showed that birthplace was much more likely than occupation to be a common factor between heads and lodgers or heads and co-residing heads. However, where occupation was a common factor, this was much more significant amongst the Jewish residents than the non-Jewish residents of the Red Bank district of Manchester. When the question of whether both work and birthplace constituted a common factor for co-residents was examined, it was found that for the Jewish residents this was a much greater factor than for the non-Jewish residents of the same area. This suggests that not only were there identifiable immigrant characteristics in Red Bank, but that these characteristics were more prevalent amongst Jewish immigrants than non-Jewish immigrants. These findings add to similar differences found between the two groups of immigrants in the previous chapter.

Analysis of occupation by spatial location found that 'Dealing' occupied key streets in the central Manchester area on the one hand, and that the manufacturing occupations were the least important spatially, on the other. These findings may suggest that these occupations were using the economic structure of the city to take advantage of passing traffic - but only where it was needed. Results for intelligibility suggest that the district of Strangeways had the strongest correspondence between local and global spatial structures when considering business addresses. Considering Strangeways' position as the lower middle-class district adjacent to Red-Bank this suggests that those Jews who were making the first step out of the district of initial settlement were able to take advantage of passing trade or to have rapid access for trade or to out-workers, since according to the Hillier definition, high intelligibility means that these districts were likely to have benefited from consistent spatial relationships between the private sections of the neighbourhood and the larger scale space structure.

Patterns of distance from the work-place to the home showed two key findings: firstly that the area of Cheetham (containing high-density Red Bank) had a tendency towards proximity between work-place and home (analysis of the sub-districts of Cheetham showed that Strangeways had the closest proximity between work and home) in contrast with middle-class Chorlton, where Jewish residents travelled the farthest between work and home; whilst the area of central Manchester contained a spread of both short and long distances between work and home. It was also found that families in Cheetham and central Manchester had the highest proportions of cases where Jews lived in the same location as they worked. These findings suggest (taking account of the relatively small sample of work addresses) that Cheetham was distinguished by the proximity of work to home, a factor that suggests that the area had a different economic pattern from the others; proximity can suggest either that the residents could not afford to travel far to work or that the pattern of employment was of the out-working, small-scale workshop type, where there was no need to travel to work, or indeed, where work and home were at the same address - as demonstrated by earlier analysis.

Lastly, analysis of the pattern of employment provided further evidence for the small-scale pattern of employment by showing that the Jewish heads in the Red Bank district were less likely to be large

²³See Pollins (1982), p. 100.

²⁴See Pollins (1982), p. 101.

employers, despite the fact that the percentage of heads who were employers was very similar for both Jewish and non-Jewish inhabitants of the district. This section also suggested that the rate of unemployment was slightly lower for Jewish inhabitants. This finding is confirmed by historical research presented in chapter 4. For example, in an article on entrepreneurship, Pollins (1989) contends that the Jewish work patterns, like other minorities, were to set up small-scale workshops rather than work in the factories (although some workshops eventually developed into larger companies).

In conclusion, the Jewish inhabitants of Manchester were found to have distinctive patterns of occupational distribution, both in comparison with the city as a whole and when compared in greater detail within the area of Red Bank. The following chapter looks at some of these findings by studying occupational structure in the analysis of the formation of the Jewish settlement in Leeds, through time.

This chapter has also highlighted findings which suggest that all the inhabitants of the district of Red Bank were different in their occupational structure from the city as a whole. This was found in the findings comparing the spread of most common occupations - for which non-Jews in Red Bank were also not wholly representative of the city as a whole and for the findings considering common occupations for members of the same household - for which non-Jews were found to be even more different from outside of Red Bank than Jews compared in the same way. These findings add to those in previous chapters which suggest that the non-Jewish Red Bank and Leylands districts were also distinctive in their social and spatial patterns when compared to the city overall.

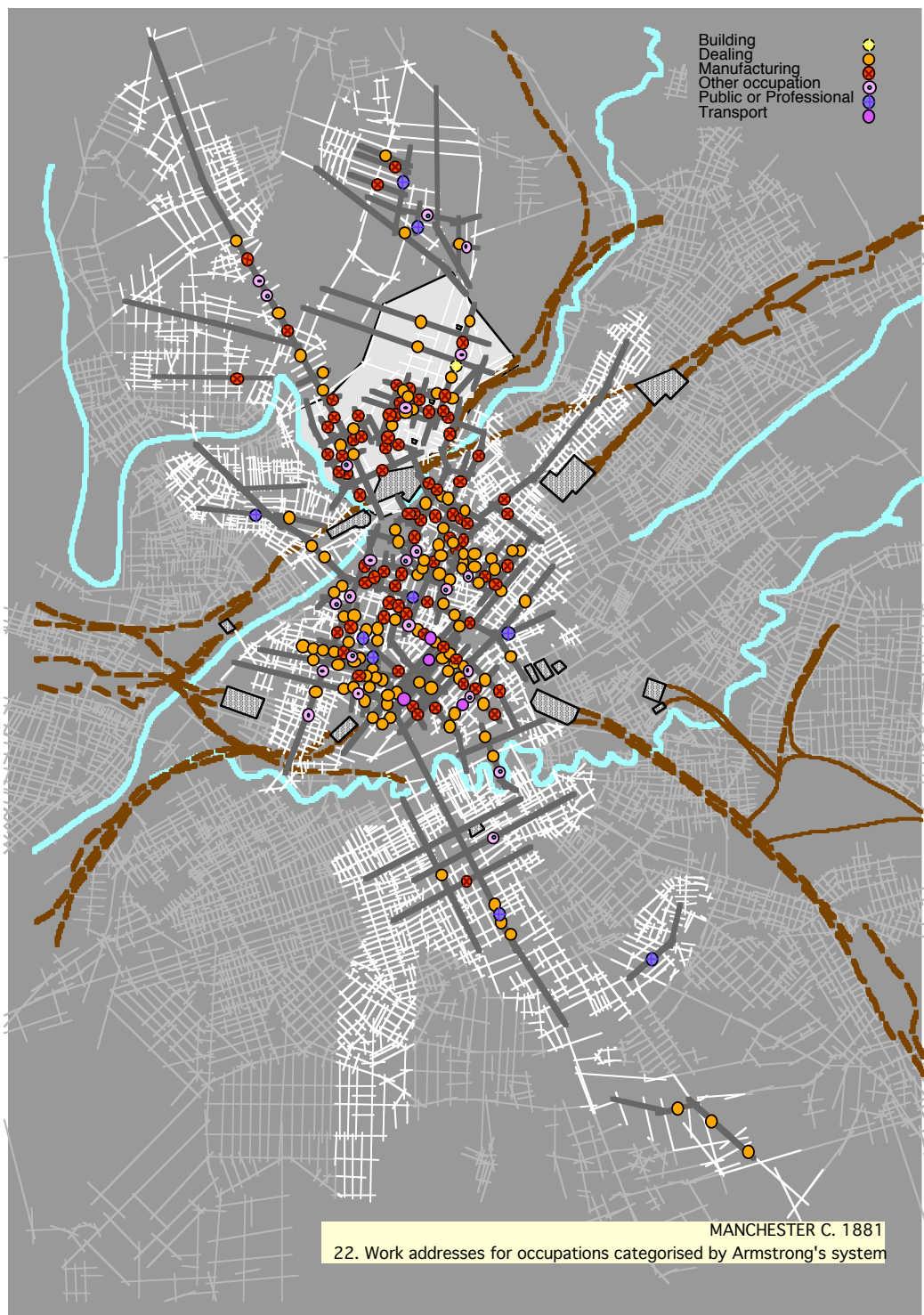


Plate 22: Manchester - Work Addresses for Occupations.

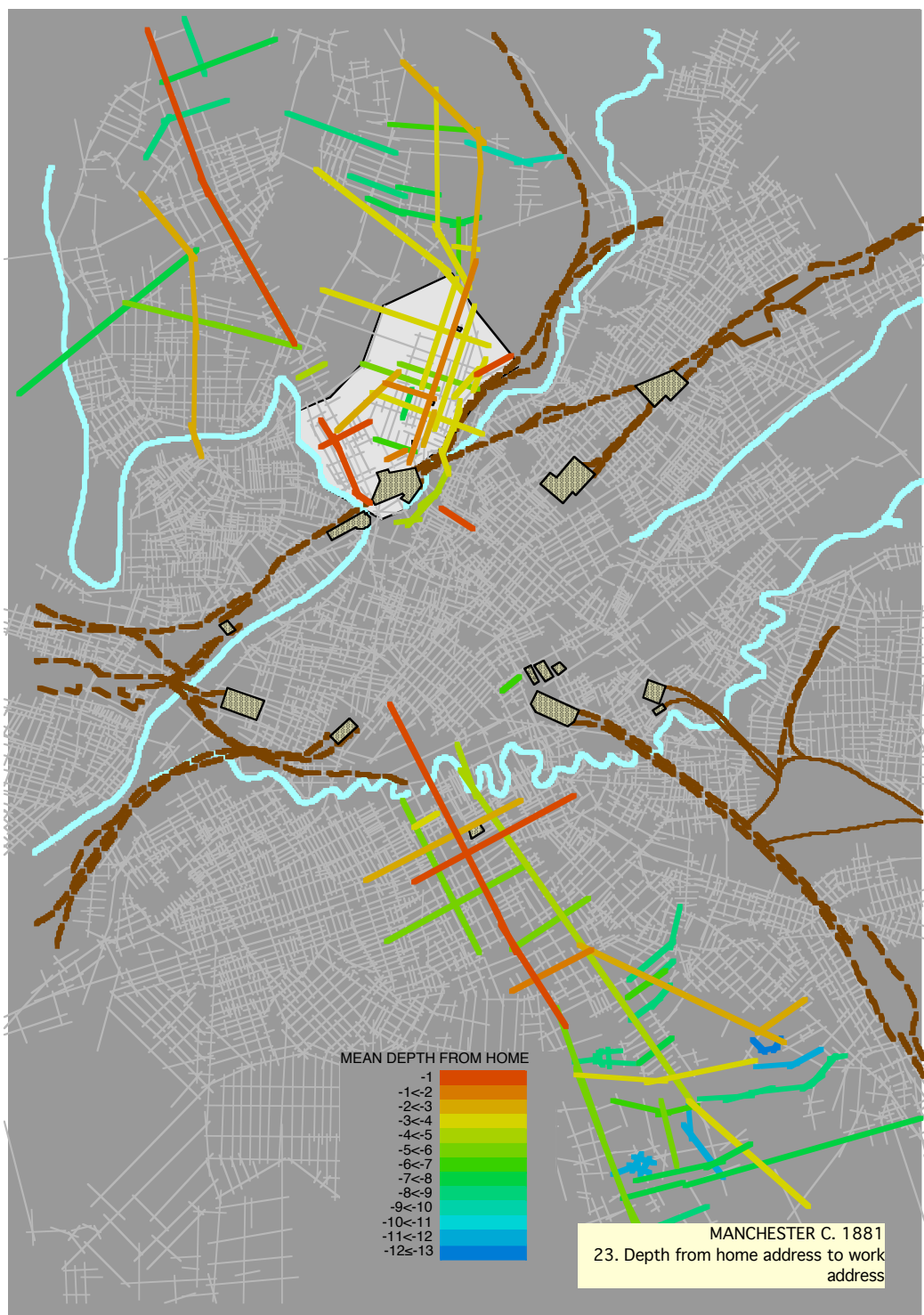


Plate 23: Manchester - Depth from Home Address to Work Address.

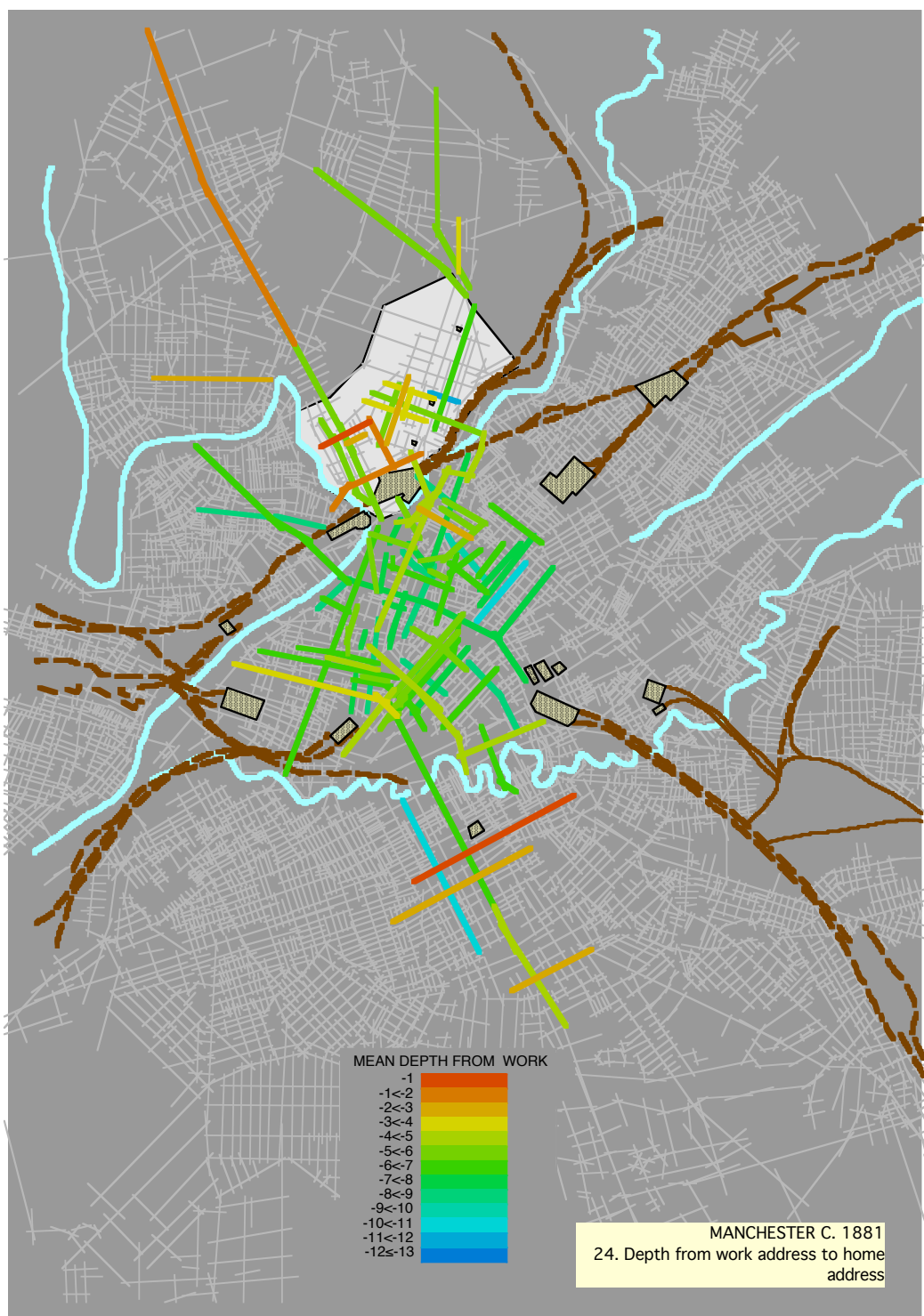


Plate 24: Manchester - Depth from Work Address to Home Address.

CHAPTER 8

Analysis of Jewish Settlement Formation Through Time: Leeds 1841-91

1. Introduction

The findings of the previous chapters led to the proposal that the area of the city in which immigrant settlement takes place tends to have specific spatial and social characteristics. Other findings have shown that the areas of immigrant settlement are in general distinguishable from the rest of the city - in measures such as social class, spatial segregation and occupational clustering. The question of whether these characteristics are found continuously through time, will be looked at in this chapter, which studies the formation of the settlement of the Jews in Leeds from 1841 to 1891 by using statistical analysis of spatial and social data. In addition, by translating the statistics into a graphic form, it is possible to look for visual clues as to the manner in which the Jewish settlement was created and shaped over time. The reason that only Leeds is studied in this chapter is that unlike Manchester, in which Jewish settlement started before the introduction of the modern census, Jewish settlement in Leeds is normally considered as having started in 1841, so it was possible to map the creation of the settlement from its start.

The previous analytical chapters proposed various theories about the formation of Jewish settlement, finding strong indications of a distinctiveness in the pattern of Jewish settlement from spatial, social and economic points of view. The purpose of this chapter is firstly to study the formation of Jewish settlement through time and to attempt to trace its expansion from around 10 to over 1400 families in six decades. The second purpose is to investigate whether the distinctiveness of Jewish settlement found in detailed comparisons of Leeds and Manchester in 1881 is maintained through the six decades studied here.

One of the aids to studying the formation of Jewish settlement in this chapter is the use of maps of various aspects of Jewish settlement in the six censuses studied. The following aspects are mapped (and can be seen at the end of this chapter): the location of Jewish families¹, the proportion of Jews to non-Jews per street, the age of the eldest child born in Britain (to indicate whether a street contains new or long-standing

¹ It should be noted that Murray Freedman (1992) was the first to translate his data on Jewish addresses into map form. However, relative density mapping is new for this data.

immigrants), and whether a street is new or existing for Jewish settlement. All of these illustrations show the findings for each of the six censuses on one page.

The first analytical section of this chapter studies the formation of Jewish settlement in spatial terms. It starts with a description of the rate of growth through the six censuses, comparing the area of the Leylands (considered the Jewish 'ghetto' by the 1880s) and the settlement elsewhere in Leeds. After this comes an analysis of the streets settled by Jews from a spatial point of view and includes a comparison of Jewish and non-Jewish households within the Leylands district. After this the spatial and ethnic density measures are brought together, first through studying Jewish settlement in Leeds overall, then studying the formation of the Leylands district in greater detail.

The second analytical section starts with a study of the formation of settlement by measuring parameters of 'foreignness' as a component of spatial location and relative density. It is followed by an analysis of the settlement patterns of sole lodgers, the change in social class through time, including a comparison with non-Jews in the same street. and lastly, a comparison of occupational structure is made to test the findings on social class and to see if Jewish occupations were distinct from non-Jewish occupations in the same area and in the city overall. The change in occupational structure through time is also looked at.

The following section describes the data used in this chapter.

2. Available Data - Leeds

2.1 Map Data

This chapter uses two axial maps for analysing Jewish settlement in Leeds: the 1841 map for the first three censuses and the 1891 map for the latter three censuses. These are illustrated in plate 25, which shows the 1841 axial map coloured up by global integration with the 1891 map in the background, coloured white. This plate indicates the difference between the two maps and consequently, the data-sets used in this chapter, as follows:

The larger map, indicated by the lines coloured white, represents the axial map of the full extents of the city in the period up to 1891. This is the map used for the spatial analysis in this chapter for the censuses 1871-1891 (and was also used in the analysis of Leeds in 1881 in the previous analytical chapters). The larger map was based on Ordnance Survey Yorkshire sheets 203.13, 203.14, 203.15, 218.01, 218.02, 218.03, 218.05, 218.06, 218.07, surveyed around 1888-89 (as described in chapter 5) .

The smaller map, indicated by the lines coloured up by global integration, represents the full extents of the built up area of the city c. 1841, with the key railways and buildings present at the time. This is the map used for the spatial analysis of the censuses 1841-1861 in this chapter and it represents the smaller area of

the city during the first three censuses studied. This map provided a separate set of spatial measures for analysis for the earlier censuses. The earlier axial model was based on maps obtained from the Royal Geographic Society library: the first edition of the Ordnance Survey, Yorkshire sheets 218, 203, 6” to the mile, which was surveyed originally in 1847².

A few points should be noted with relation to plate 25:

- It is evident when comparing the two areas, that the city grew dramatically in the 50 years in question; however it is also evident that much more growth took place to the west and to the north and north-east than to the remaining areas of the city.
- The position of the area of Leylands with relation to the edge of the map also changed correspondingly; whilst in 1841 Leylands was very close to the northern boundary of the city, by 1891 a substantial built-up area had grown up around it. This is also evident in the change of the ward designation for the district in which Leylands was situated, which was ‘North Ward’ in 1841 and ‘Central Ward’ in 1891.
- The distribution of global integration is also different in each of the maps (the global distribution for the Leylands area in the later map can be seen in the box on the left of plate 25). The later map shows a shift of the global core farther from the Leylands area and more of the streets around the city centre (indicated by the location of the city square in an area coloured in the warm - integrated range). The change in the distribution of integration is probably due to the change in the size of the map, which had an impact on the centre to edge spatial configuration of the city.

2.2 Data on Jewish Settlement in Leeds, 1841 to 1891 (electronic data sets)

These 6 data-sets for each of the censuses from 1841 to 1891 are derived from the work of the historian Murray Freedman, who extracted and computed lists of Jews residing in Leeds from the census lists in question. The method used for compiling Freedman’s data for this chapter is described in chapters 3 and 5. Following is a summary of the compilation process:

The extents of the area covered for identifying Jewish households was the whole of Leeds - including what were in 1851 and 1861 the outlying townships that are today's suburbs. Each successive census showed an increase of the Jewish population. Plate 26 gives an indication of the geographic spread of Jewish settlement, by colouring up the axial map with thick blue lines for each census in turn, according to the streets which had Jewish inhabitants.

² See Ordnance Survey Map (1852).

2.3 Full census data on the streets in which the Jews resided in Leeds

In addition to the 1881 census data provided by the ESRC data archive and used in the other analytical chapters³, the contextual data for all streets in which Jews lived in the other five censuses were copied and processed from the microfiche films of the original census enumerators' books in the manner explained in chapter 3.

3. Spatial and Ethnic Density Analysis

3.1 Population Structure Analysis

Table 1.1 lists the population totals for all six censuses and indicates the rate of growth of the Jewish population in the city overall and within Leylands. It is evident that the rate of increase became more rapid from 1861 onwards - when the Jewish population increased by increments of 2.5 to 3.5 times every 10 years. The other indicator of the formation of immigrant settlement is the number of sole lodgers - these are Jewish individuals lodging with non-Jewish families. Here we find a strong rate of decrease in the proportion of sole lodgers within the total number of Jewish inhabitants from census to census. Starting with 50% of inhabitants in the earliest census, the proportion decreases to 8% and only rises slightly in the 1891 census. The latter finding may reflect the mass immigration of Jewish refugees from eastern Europe that took place from 1881 onwards, as explained in chapter 4, which changed not only the size, but the make-up of the settlement.

We also see in table 1 the formation of the Leylands district through the calculation of the proportion of Jewish families living within the Leylands district as a proportion of all Jewish families. We see that the proportion increases in every census except the last, where the proportion drops from 82% to 70%, suggesting that the district became more 'Jewish' with each successive census. The decrease in the last census may be an indication that Jewish families were beginning to move out of the district by this period.

Table 1: Population Totals⁴					
Total family and population figures, per census					
	Number of families	Number of families in Leylands	number of sole Jewish lodgers	sole lodgers as % of all J. inhabitants	Leylands families as % of all Jewish families
1841 census	9	1	28	50%	11%
1851 census	21	10	62	43%	48%
1861 census	44	23	30	14%	52%
1871 census	195	130	135	14%	66%
1881 census	558	457	245	8%	82%
1891 census	1404	1002	844	11%	70%

³See Genealogical Society of Utah - Federation of Family History Societies (1997).

⁴ The first four columns in this table are based on Freedman (1992), p. 23.

Plate 26 illustrates these data by indicating the streets of Leeds in each of the six censuses which contained any Jewish addresses with a dark blue line on the background of the global integration map for Leeds for that census (1841-1861 pictures are on a background of the 1841 axial map and 1871-1891 pictures are on a background of the 1891 axial map). A couple of points emerge from this picture:

- We see that the number of streets increases from census to census and that these start from two cores, one in the Leeds city centre, to the west of the town centre and city square (in the bottom left of each mini-map) and one in the Leylands district, coloured grey. It is important to note that of the two cores, only the Leylands one developed into the key Jewish district and also to note the streets from which Jewish settlement disappeared after the first two censuses were in a more spatially integrated part of the city, which as indicated in chapter 4, was where Jews lodged in the initial stages of settlement in Leeds. It is also notable that the settlement in Leylands is only clearly more intense - with more 'Jewish' streets than elsewhere - in the fourth decade of settlement.
- We also see that only in the sixth census, 1891, does Jewish settlement start to occur east of the Carr and Lady Becks - the pale blue line running east of the Leylands district. This geographical boundary evidently was a barrier to Jewish settlement before that date.

3.2 Spatial Analysis

Section 3.2 first compares spatial parameters within and outside of Leylands, then concentrates on Leylands, comparing Jewish to non-Jewish spatial parameters; then concentrates on Jewish households only, comparing newly Jewish streets to existing Jewish streets in each decade.

• Review of Data

The following analysis is based on the two axial maps shown in plate 25 and described in the introduction above. Table 2.1 lists the mean values for 'Spatial Model 1841-1861', which refers to the smaller axial map in plate 25 and also lists 'Spatial Model 1871-1891', which refers to the larger axial map in plate 25 (which is illustrated in full colour in plates 13, 14 and 15 in chapter 5). The t-tests for the first three censuses compared mean values for all streets with Jewish inhabitants in each census, against the relevant mean values for the axial model in question, to see whether the mean spatial values for the streets with Jewish addresses were significantly different on average from the spatial model for Leeds. This analysis includes streets where the only Jewish inhabitants were Jewish lodgers living with non-Jewish households.

Table 2: Summary of Mean Spatial Values, Leeds, per census					
2.1 Mean spatial values for streets with Jewish households, per census. ⁵					
	GLOBAL	LOCAL	RAD-RAD ⁶	LINE LENGTH IN PIXELS	DEPTH FROM GLOBAL> IN MODEL
<i>Spatial model 1841-61</i>	.878	2.373	1.382	15.50	7.790
1841 census (n=19)	1.063	2.934	1.564	39.92	4.987
t-tests:	p< .0001	p=.0275	p< .0001	p=.0024	p< .0001
1851 census (n=20)	1.065	2.676	1.522	30.19	4.986
t-tests:	p< .0001	insignificant	p< .0001	p=.0051	p< .0001
1861 census (n=27)	1.148	2.863	1.614	40.89	4.049
t-tests:	p< .0001	p=.0436	p< .0001	p=.0008	p< .0001
<i>Spatial model 1871-91</i>	0.745	2.491	1.254	16.54	10.032
1871 census (n=61)	.969	2.987	1.389	30.12	5.089
t-tests:	p< .0001	p<.0001	p< .0001	p< .0001	p< .0001
1881 census (n=100)	.964	2.872	1.394	31.26	5.290
t-tests:	p< .0001	p<.0001	p< .0001	p< .0001	p< .0001
1891 census (n=177)	.939	2.720	1.371	29.97	5.682
t-tests:	p< .0001	p<.0001	p< .0001	p< .0001	p< .0001

We see in table 2.1 that Jewish streets are consistently more globally integrated than average. This pattern is maintained for radius-radius integration and depth from the most globally integrated street, for which Jewish streets are consistently and significantly more integrated and closer in step-depth than average for all streets. However, in the case of local integration, only the censuses from 1871 onwards show statistically significant greater local integration than average, even though the integration rates for the earlier censuses are slightly greater than the average for the model as a whole.

• Spatial Analysis Comparing Leylands and Outside Leylands Settlement

The values in table 2.1 summarised spatial analysis of the Jewish settlement in Leeds overall. Following is a series of univariate line charts which describe this analysis by showing the mean spatial values for Jewish households, split by streets within the Leylands and streets outside of the Leylands.

Figure *a* below, suggests that for global and radius-radius integration, there is a similar pattern within Leylands (indicated by red dots) with an increase in mean values in the first three censuses, but a drop down to a much lower and more consistent rate of integration in the last three censuses. The big drop from 1861 to 1871 raised the possibility that this was due to the use of different maps for 1841-61 and 1871-91. In order to test this, the same plots were made again, using the spatial values of the larger map for all six censuses. The pattern was maintained, confirming that these findings were not just a result of mapping, but indicated a real drop in integration for the later censuses.

⁵The values in this table are based on a series of tables which summarise data per street for each census.

⁶The mean depth value from the most integrated line in the smaller (1841-1861) axial map was lower, at 8, so rad-rad for this map was calculated at radius 8 rather than radius 10 for the later, larger map.

Figure a: line charts showing global integration, radius-radius integration for each census in turn, split by streets within and outside of Leylands. The x axes show mean 1841-1891 values from left to right.

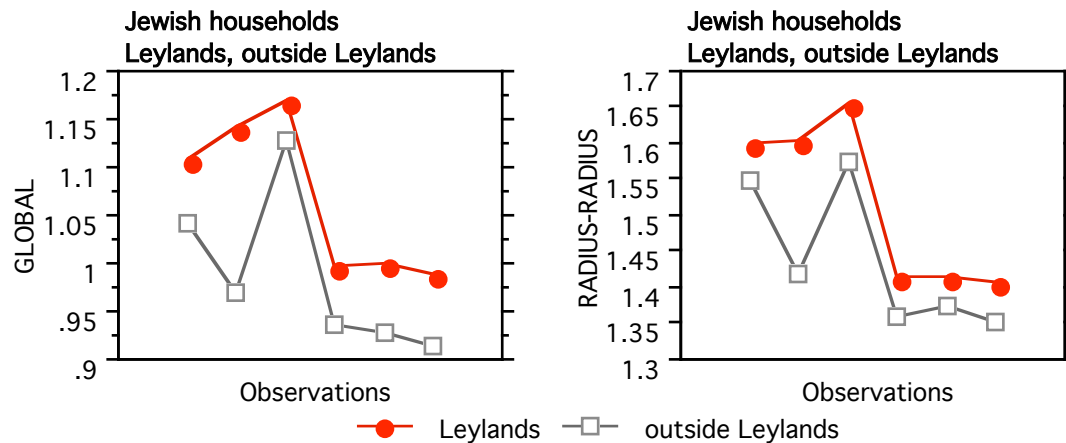
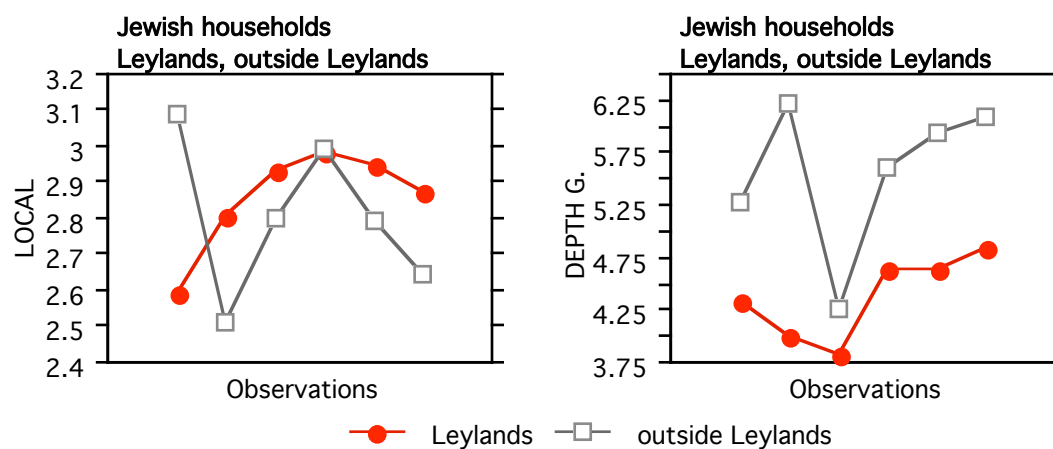


Figure b shows that the plot of local integration for Leylands households follows a different pattern, with an increase in the first three censuses, as above, but a steadier and less dramatic decrease in local integration values for the last three censuses. The plot for depth in figure b(right) shows that for the Leylands, proximity to the global integration core increased in the first three censuses, but dropped, as in the other spatial measures, in the case of the last three censuses.

Figure b: line charts showing local integration, depth from the global integration core for each census in turn, split by streets within and outside of Leylands. The x axes show mean 1841-1891 values from left to right.



If we compare these findings with the plots for the streets outside of the Leylands (indicated by the grey squares) we find a slightly different pattern, whereby all the censuses except for 1851 follow the same pattern. It is notable that this blip in spatial values for 1851 mirrors a blip found above in density values for this census and may be due to the relatively small numbers of inhabitants overall in the first two censuses. However, it is more likely that this is due to the different location of the core Jewish settlement in the first two censuses, as can be seen in plate 26, which shows that many of the streets were outside of the Leylands district, close to the city centre. The reason for the move from the city centre to the Leylands district is not clear-cut, but may be due to the fact that in the first few censuses many of the Jewish immigrants were lodgers, who might have preferred the locations close to the town centre, possibly for employment availability. This explanation is also suggested by the historical review given by Freedman (1992) who states that the majority of the relatively large influx of immigration from Russia and Poland in the 1860s

were tailors, who settled in the Leylands where the burgeoning tailoring trade was developing⁷.

The other finding which is more significant in the case of the outside Leylands streets is that these tend to have lower spatial values throughout the censuses, including depth to the global core (since lower depth means closer proximity). It is also notable, however, that the differences lessen in the last three censuses.

• Spatial Analysis of Leylands, Comparing Jewish and non-Jewish Households

Chapters 5 and 6 described analysis of the district of the Leylands as a separate entity where comparison was made between Jewish and non-Jewish households within the Leylands. Whereas above calculation was made in a table which averaged spatial values across all 'Jewish' streets in Leeds, the analysis below was made in a table that repeated the spatial values for each household in the street. In this way, the number of cases of Jewish versus non-Jewish households in a street was built into the calculation and spatial values were weighted for density. Following is a series of univariate line charts which show the mean spatial values for each census in turn from left to right.

Figure *c* below shows the results for global and radius-radius integration (which was radius 8 for the first three censuses and radius 10 for the last three censuses). The charts indicate that except for the earliest censuses, non-Jewish households tended to have higher spatial integration than Jewish.

figure c: line charts showing mean global integration values, mean radius-radius integration values. The x axes show mean 1841-1891 values from left to right.

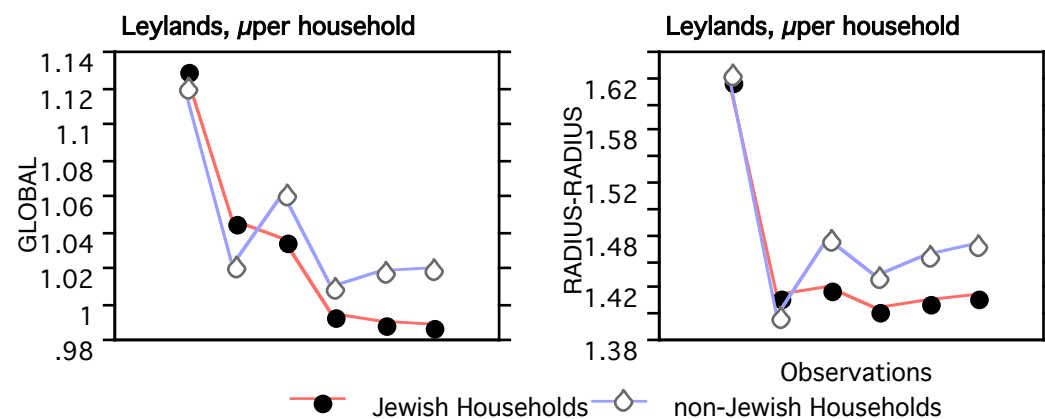
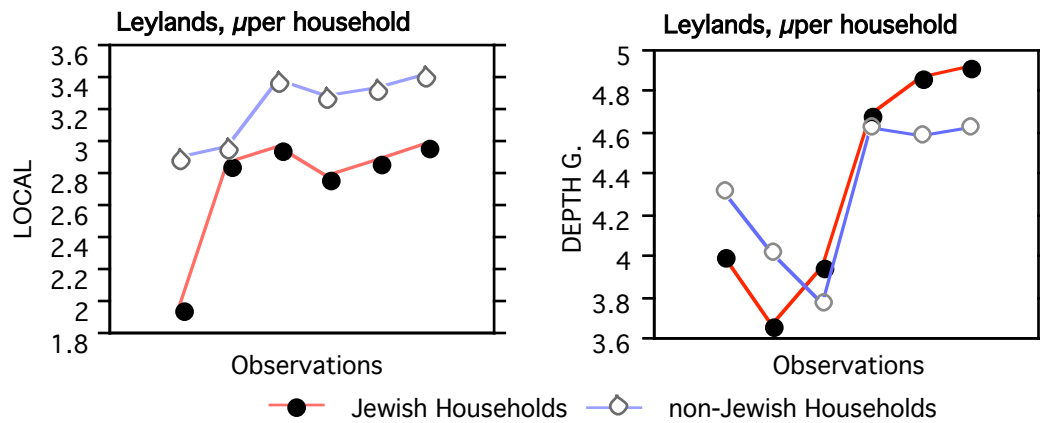


Figure *d* below, shows the univariate chart for local integration, which indicates the same pattern as above, with Jewish households being consistently less locally integrated than non-Jewish households. Figure *d* also shows step-depth from the most globally integrated line - an indicator of axial distance from the spatial core of the city. Here we see that in the first three censuses, Jewish households are closer to the global integration core, but from the 1871 census onwards, especially in the last two censuses, Jewish households tend to be more distant from the global integration core than their non-Jewish counterparts.

⁷See Freedman (1992), pp. 6-7.

figure d: line charts showing mean local integration values, mean depth from global integration core. The x axes show mean 1841-1891 values from left to right.



The following analysis considers the depth values for the Leylands district for key streets within the district.

Figure e shows the streets in question in an illustration copied from chapter 5:

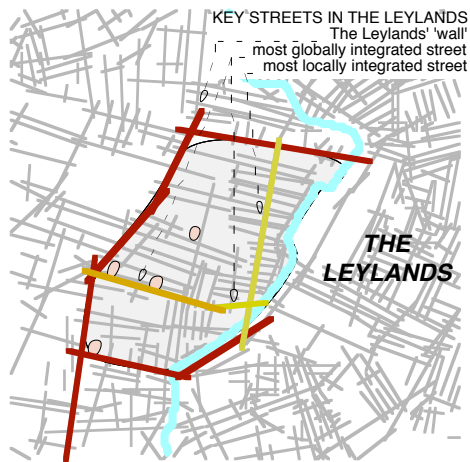


figure e: key streets in the Leylands.

Figure f shows mean depth from the key streets around the Leylands (the Leylands 'wall'). This plot suggests that except for the 1851 census, Jewish households were located deeper from the 'wall' than non-Jewish.

figure f line chart showing mean depth from Leylands 'wall'. The x axis shows mean 1841-1891 values from left to right.

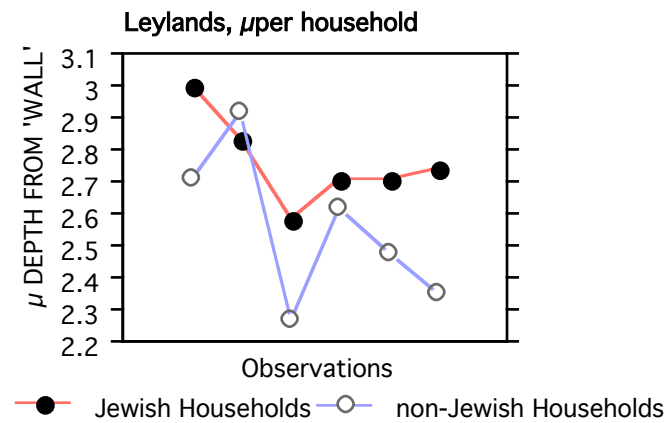
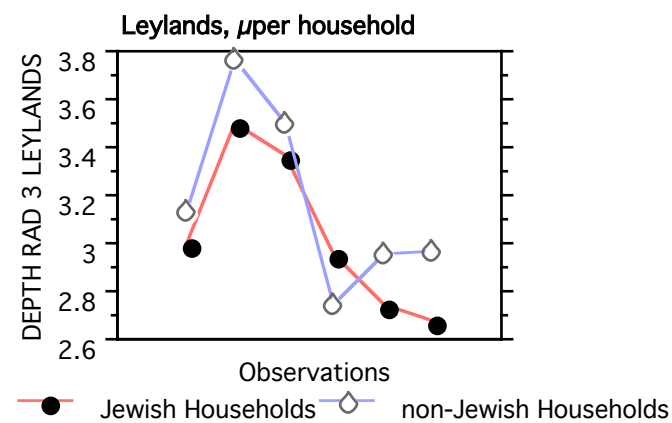


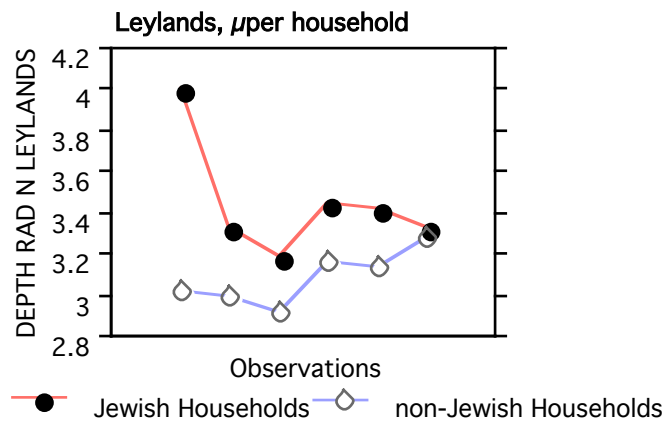
Figure g below shows the axial distance from the most locally integrated street in the Leylands and suggests that the Jewish households tended to be shallower to the main local street than non-Jewish households, except for the 1871 census.

figure g: line chart showing mean depth from most locally integrated street in Leylands The x axis shows mean 1841-1891 values from left to right.



Lastly, figure *h* below shows the univariate chart for depth from the most globally integrated street within the Leylands, which suggests that Jewish households were consistently more distant from the main street than non-Jewish households.

figure h: line chart showing mean depth from most globally integrated street in Leylands The x axis shows mean 1841-1891 values from left to right.

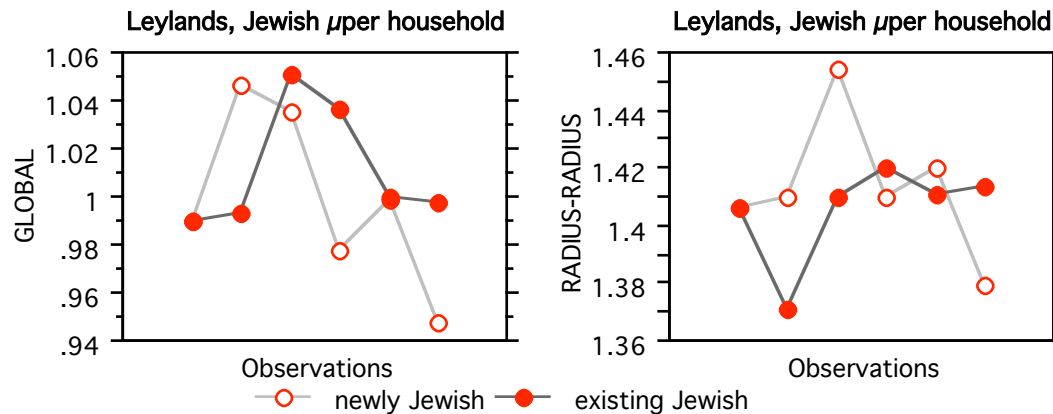


In summary for the first four measures, we see that the higher values tend to occur in the non-Jewish households, rather than the Jewish households. If we also look at the pattern through time, it is evident that for the first four measures, the difference between Jewish and non-Jewish households is maintained once it has been established. In other words, it could be suggested that the form of Jewish settlement in the Leylands became established in 1861 and was maintained from then onwards. The local measures of depth within the Leylands indicate a more complex pattern. Although overall it is evident that Jewish households tended to be more distant than non-Jewish, the difference is not consistent through time and in the case of distance from the local main street, it is possible that the trend starts to reverse in the last two censuses.

• Spatial Analysis of Jewish Households in Leylands, Comparing New and Existing Streets

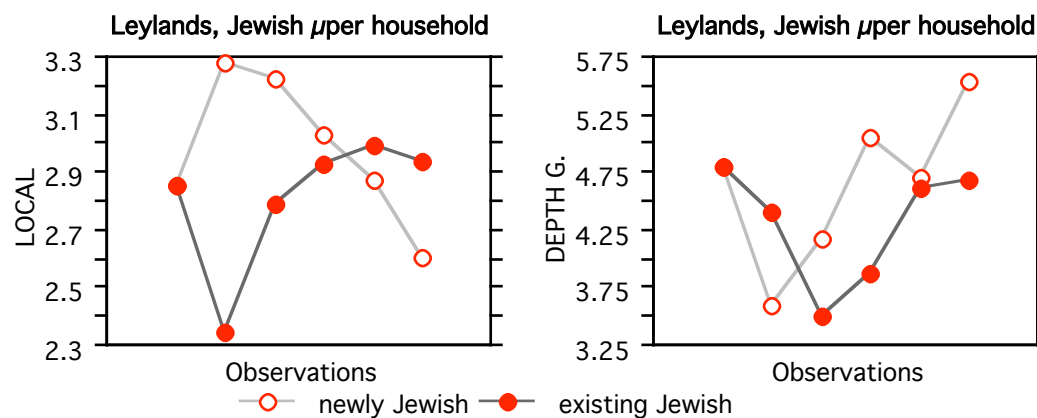
This section looks at the establishment of the Jewish settlement in Leylands by distinguishing for each census between streets that were already settled by Jews and streets that were newly Jewish for that census (the 1841 census could not be split by this measure since it was the first decade of settlement). The following series of univariate plots shows the distribution of the various spatial measures for each consecutive census from left to right, for existing and newly Jewish streets on average (for the Leylands only):

figure i: line charts showing mean global integration values, mean radius-radius integration values for Jewish households in Leylands. The x axes show mean 1841-1891 values from left to right.



We see that in the case of global integration, that the rates for existing Jewish streets are generally higher than for newly Jewish streets when comparing the two groups within each census - in other words, in each consecutive census, the newly settled streets are not as globally integrated as the streets already settled by Jews. The largest margins between the two are in 1871 and 1891, both of which were census years which followed a large influx of new immigration (62% and 61% of Jews were immigrants in those census years, in comparison to an average of 54% in other censuses).

figure j: line charts showing mean local integration values, mean depth from global integration core for Jewish households in Leylands. The x axes show mean 1841-1891 values from left to right.



In the case of local integration, there is a marked difference between new and existing Jewish streets across the censuses. We see a trend of newly settled streets to have lower local integration values as time goes on, whilst existing Jewish streets tend to be more locally integrated; a trend that increases with time towards the 1891 census.

The measure of depth from the most globally integrated street in Leeds, indicates a pattern, whereby in each census, newly Jewish streets tend to be relatively distant from the global core, when compared with streets already settled by Jews (with the only exception being the settlement in 1881).

Further analysis was undertaken to look at the fine-scale spatial form of Jewish settlement. By using the measures of depth from most globally and locally integrated lines within the Leylands district area and

depth from the Leylands 'wall'.

In the first instance, the three measures of depth were plotted for the 6 censuses as a univariate chart for the dense streets, as seen in figure *k* below (the higher the depth, the farther the axial distance):

figure k: line chart comparing mean depth from Leylands 'wall', mean depth from most locally integrated street in Leylands, and mean depth from most globally integrated street in Leylands for Jewish households in Leylands. The x axis in the chart shows the mean 1841 to 1891 results from left to right.

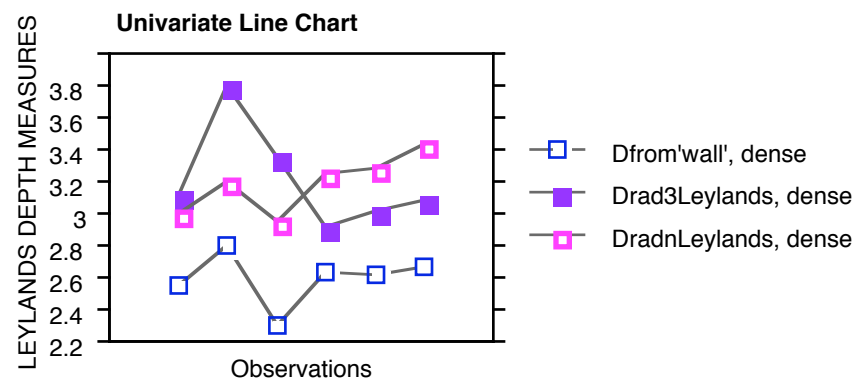


Figure *k* indicates that in general, there is a variation in depth between censuses. However, it is also notable that aside from depth from the most globally integrated street, the difference between the first and last censuses is negligible; distance from the 'wall' starts at 2.5 and ends up at 2.6 and distance from the most locally integrated street starts and finishes at 3.1 (even though it increases greatly between 1841 and 1851), only depth from the most globally integrated street increases, from 3.0 to 3.4.

This analysis has shown a tendency for newly settled streets to be less integrated than streets already settled by Jews and for the difference to increase with time. This suggests that as increasing numbers of Jews moved into the area, they initially settled in integrated streets but as time went on, new immigrants tended to settle in less well integrated streets than existing Jewish settlers.

This section has shown that analysis of Jewish settlement has distinctive characteristics relating to its location in the Leylands district. It has also raised the possibility that a pattern can be observed in the manner in which the settlement is formed through time - with a distinction to be made between established Jewish streets and new Jewish streets. The following section investigates these possibilities by studying Jewish settlement according to the relative density of Jews to non Jews per street: 'ethnic density'.

3.3 Spatial and Ethnic Density Analysis

Section 3.3 first compares spatial parameters within and outside of Leylands, then concentrates on Leylands, comparing Jewish patterns of settlement. 'Ethnic density' or 'relative density' is the proportion of total number of Jews from the total number of inhabitants, per street.

• Review of Data

Table 1.2 shows the establishment of the settlement within the Leylands by tracking the increase in density within and outside of the district. We see that along with the increase of the Jewish population of the area, that their density per street also increases in every census, including the latest (except for a blip in 1861, when the density goes down slightly). This finding can be tested further by looking at the number of 'Jewish' streets within the Leylands and as a proportion of all streets in the Leylands (which totalled 65). This can be seen in the second pair of columns, where the number in parentheses shows the percentage increase.

We see that the proportion of 'Jewish' streets from all streets in Leylands is consistently greater than that of the mean density per street in each census, but the rate of increase is quite different; whereas the mean density per street tends to increase in every census, the rate of increase in the proportion of Jewish streets goes down in every census from 1871 onwards.

Table 1: Population Totals				
1.2 Mean density and street figures, per census				
	mean density in Leylands	mean density outside Leylands	No. of 'Jewish' streets in Leylands	% of 'Jewish' streets in Leylands from all 65 streets
1841 census	6%	4%	6	9%
1851 census	10% (+6)	9%	10	15% (+6)
1861 census	8% (-2)	7%	13	20% (+5)
1871 census	17% (+9)	11%	33	51% (+31)
1881 census	38% (+21)	15%	48	74% (+23)
1891 census	60% (+22)	27%	58	89% (+15)

The distribution of relative density is also illustrated in plate 27. Density is represented in 6 groups. Streets with over 50% Jews are coloured in 3 shades of blue, the darker the colour, the higher the proportion of Jews to non-Jews. The streets with under 50% Jews are coloured in 3 shades of red, the darker the colour the lower the proportion of Jews to non-Jews. (The 1881 values were also used in plates 17 and 18 in chapter 5). A number of points emerge from this illustration:

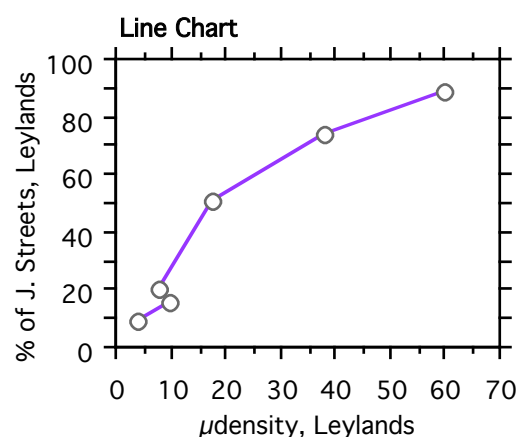
- Majority settlement (where Jews are over 50% of inhabitants in a street) only occurs for the first time in 1871, with four streets within the Leylands district. The distribution of blues continues to be mainly confined to the district in 1881 and only in 1891, after the major influx of immigration, do majority streets start to appear outside of the area and even here, only in isolated cases and mainly in short streets where the small number of households means that only small numbers of Jews suffice to put them into the majority.

- The bands of density between 25% and 75% tend to occur one step off the main streets, whilst the more densely Jewish streets (the two darker shades of blue) are more axially distant.
- If we look at 1881 and 1891 we can see that in 1891 the streets coloured blue tend to be close to those which were coloured blue in the 1881 census. It is also evident that the north-western sector of the Leylands is almost totally red.
- Although in 1881 and 1891 there are many streets settled outside of the Leylands, these are nearly all settled in small numbers, with proportions of up to 25% in most cases.
- Streets which are not continuously settled from census to census tend to be in the lowest band of density (dark red).

The analysis below and in the following section, seeks to prove these patterns statistically.

The regression plot in figure 1 below, compares the proportion of Jewish inhabitants in the Leylands with the proportion of Jewish streets in the Leylands (the figures of the first and last columns in table 1.2). We see in figure 1 below, that the greater the mean Jewish density per street, the greater the overall density measured by the number of Jewish streets. Yet we also see a flattening out of the plot in the last three censuses, where the increase in the proportion of streets is not as rapid as the increase in the street by street density. This suggests that rather than spreading out throughout the district, that Jewish families moved into streets in which other Jews were already resident, thus increasing the density in those streets over others.

figure 1: bivariate line chart of mean density of Jewish to non-Jews per street in the Leylands district vs. the proportion of Jewish to all streets in Leylands.



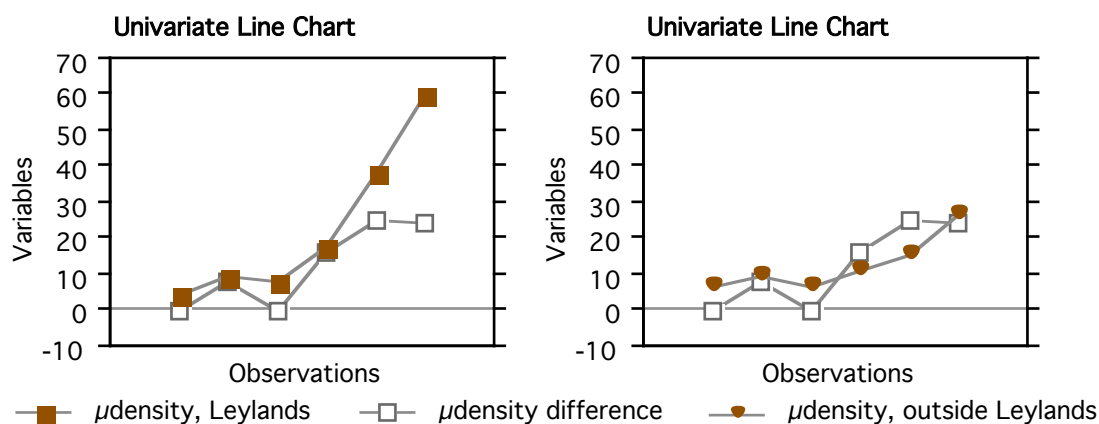
This analysis helps confirm the findings in plate 27, that the spread of Jewish population within Leylands tends towards intensification of density within a street rather than a distribution over the district overall. In order to analyse this question further, the Jewish settlement of Leeds is compared for streets within and outside of Leylands in the following section.

• Spatial and Ethnic Analysis Comparing Leylands and Outside Leylands Settlement

The following analysis looks at the change in density per street between each census and the one preceding

it. The measure was averaged out per census for Leylands and non-Leylands streets. The univariate charts in figure *m* below show the mean density for each census chronologically from left to right, for inside and outside of the Leylands, along with a plot of the mean density difference (which is the average difference between each census and the one preceding it - hence there is no value for 1841)⁸. We see first of all that density increases with time, with a more rapid climb in density in the last three censuses. We also see that the amount of difference from census to census is greater within the Leylands than outside Leylands. The sharp increase in density for the 1891 point in the right hand graph indicates the beginning of settlement outside of the Leylands in the 1891 census.

figure m: line charts comparing mean density within and outside of Leylands with the mean density difference from each census to the preceding census (except for 1841). The x axis in each chart shows the mean 1841 to 1891 results from left to right.

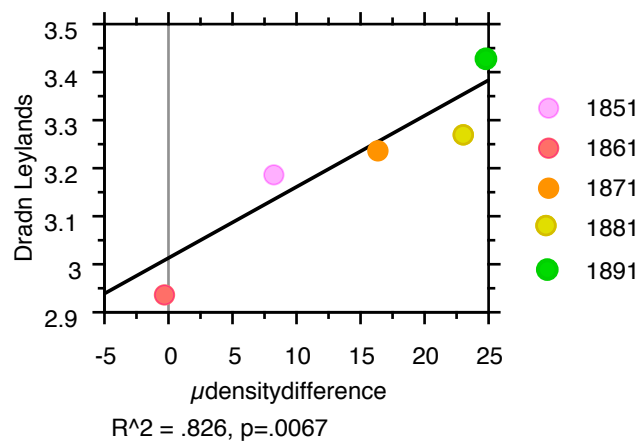


The next stage in the analysis was to see if there was a relationship between the change in density and the spatial distribution within the Leylands, using the internal depth measures employed in section 3.2 above. This was in order to find statistical proof of the pattern identified above in plate 27, whereby the spread of Jewish settlement tends to be along the main streets and then spreads out into the interstices of the district.

Each of the three measures of depth from the Leylands 'wall', depth from the most globally integrated street in Leylands and depth from the most locally integrated street within Leylands, were plotted against density difference within and outside of the Leylands. Only the following scattergram in figure *n* below, which plots depth from the most globally integrated street within the Leylands (Hope Street) produced a statistically significant result. The scattergram suggests (if we account for the limitations of a 5 point scattergram) that the greater the difference in density, the greater the increase in distance from the main global integrator within the Leylands. In other words, in years where there was a big population jump, the population tended, on average, to become more distant from the main road in the district.

⁸For full explanation of this calculation, see note on the table called 'census 41-91 social' in appendix.

Figure n: scattergram of mean density difference from each census to the preceding census (except for 1841) vs. depth from the most globally integrated street in Leylands.



This finding can be further illustrated by looking at plate 28. The distribution of newly and existing Jewish streets can be seen in plate 28, which shows the location of Jewish streets in each of the six censuses, colouring up streets new to Jewish settlement in pale, thick lines and existing in thin black lines. This illustration is also overlaid with a map of step depth from the most globally integrated street in Leylands: Hope Street (where the warmer the colour, the closer the street to the point of origin). This plate illustrates the formation of the settlement in Leylands on the one hand and the disappearance of the original settlement near the town centre, on the other. A few points emerge from this illustration:

- If we concentrate on the Leylands district we see that initially settlement takes place on streets one or two steps away from Hope Street. After this there seems to be a tendency to infill settlement in the northern part of the district, again in streets one or two steps off. Finally, especially in the 1891 census, we see that settlement starts to occur in short streets more distant from the most globally integrated street.
- The tendency towards infilling occurs also outside of the Leylands district, as can be seen for example in the cluster of streets to the north east of the district, which are initially settled in 1871 in streets two steps of the main north-south street there; by 1891 the majority of the streets in this area have at least one Jewish household. On the other hand, although most Leylands streets have at least one Jewish family in 1891, it is notable that there are some key streets which remain without any Jewish settlement.
- We see that newly Jewish streets tend to be more axially distant from the point of origin than existing Jewish streets

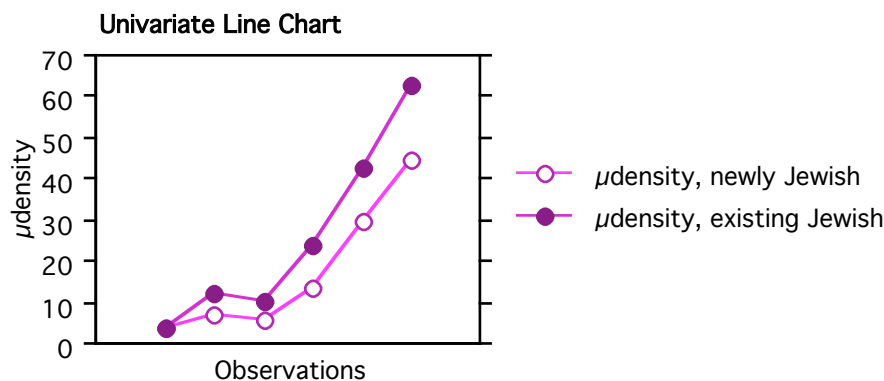
The findings on the formation of the settlement in the Leylands district pose a question of whether the increase in density from census to census follows an increase in spatial values. This is analysed in the following section.

• Spatial and Ethnic Analysis of Jewish Households in Leylands, Comparing New and Existing Streets

The question of intensification of settlement proposed above was looked at by distinguishing for each census, between streets that were already settled by Jews and streets that were newly Jewish for that census (the 1841 census could not be split by this measure as it was the first census). This is illustrated in plate 28, which shows as stated before, that newly Jewish streets tend to be more axially distant from the point of origin than existing Jewish streets.

Figure *o* below is a univariate plot that shows the distribution of density for each consecutive census from left to right, for existing and newly Jewish streets on average, (for the Leylands only). We see that in both cases density increases from census to census. But, the higher rates and steeper curves for the ‘existing Jewish’ rates suggest that streets which were already Jewish in the previous census, consistently became more densely Jewish in the following census. This finding serves as further confirmation of the theory that the formation of the settlement follows a pattern of intensification.

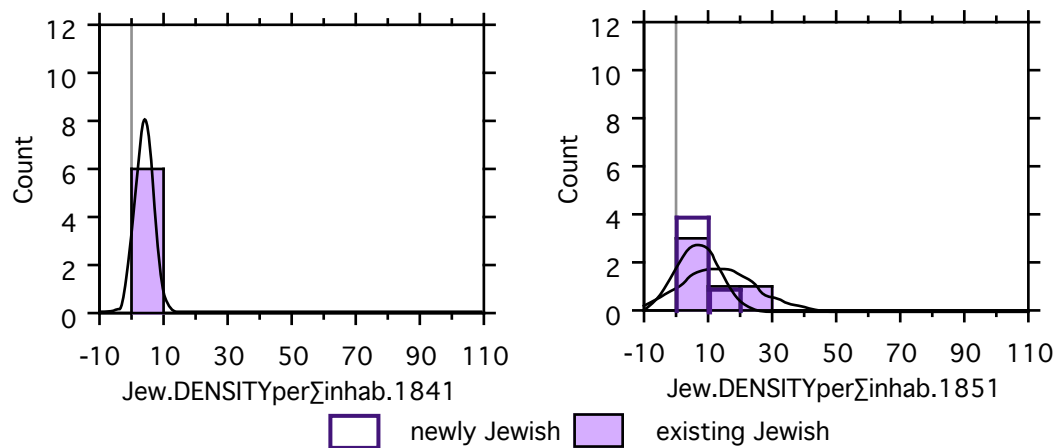
figure o: line chart showing mean density for newly Jewish streets and existing Jewish streets within Leylands only. The x axis shows the mean 1841 to 1891 results from left to right; no 1841 newly Jewish.



This finding was investigated further, by looking at the change in distribution of density from census to census per street (rather than averaging across all streets in the census). The following histograms show the frequency distribution of mean density per inhabitants for the six censuses, with the range locked for comparison. The 1841 chart does not show a breakdown of new versus existing, since it was the first census to be analysed.

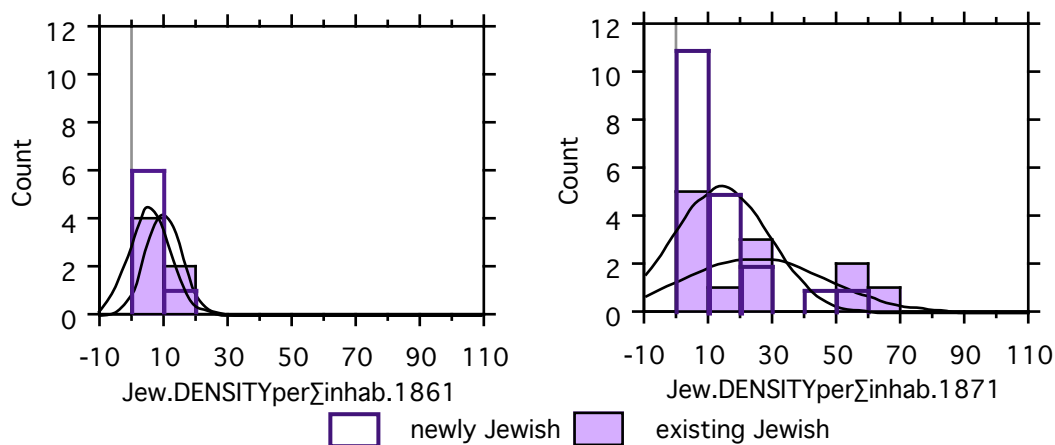
We see in the 1841 and 1851 histograms, in figure *p* below, that the density rates are contained within the first band and then the first three bands, respectively. We also see that in 1851, the highest density occurs only for existing Jewish streets, and that newly Jewish streets are the least dense, with a majority within the first band of density (i.e. 0>10% density).

figure p frequency distribution of Jewish density for 1841 and 1851 censuses, split between newly Jewish and existing Jewish streets within Leylands only.



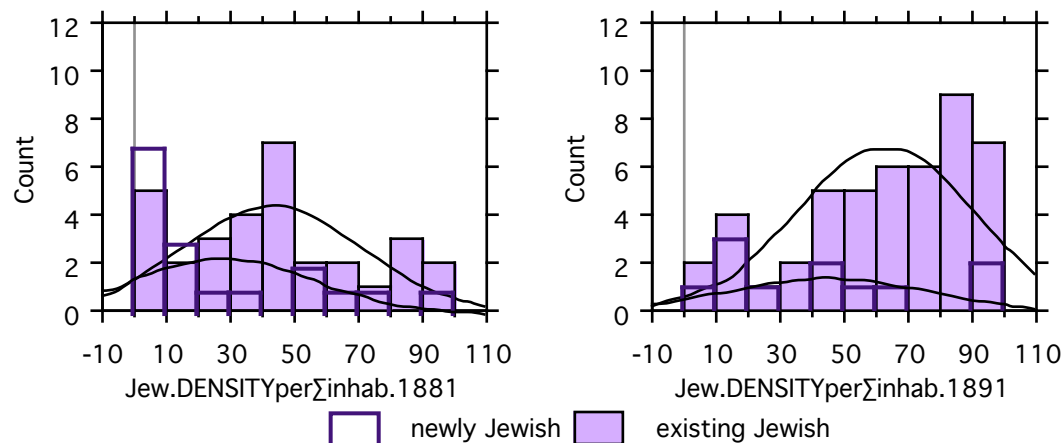
In figure q below we see that the 1861 histogram shows that the density range decreases again to the first two bands; again the newly Jewish streets tend to be concentrated in the bottom band. The 1871 histogram shows a move of density up into the 60<70% density range, although newly Jewish streets are mostly in the first two bands, with only a couple of cases in the fifth and sixth bands.

figure q frequency distribution of Jewish density for 1861 and 1871 censuses, split between newly Jewish and existing Jewish streets within Leylands only.



In figure r below we see that the 1881 histogram shows a distribution of density for the first time into the 70≥100% range. Existing Jewish streets have a trend towards being denser than newly Jewish streets, with a higher proportion of cases in the upper 5 bands. The 1891 census shows that density is now concentrated in the upper 5 bands for existing streets, which have a small number of cases in the lower 5 bands. Newly Jewish streets in the 1891 census are spread more or less evenly across the lower bands, yet still have fewer cases in the upper 5 bands. The 1891 histogram also demonstrates the increase in density after the major influx of population in the 1880s, which caused the Jewish population of Leeds to grow by over 250%, with many more cases overall; yet it is notable that the increase is mostly in existing streets, newly Jewish streets are actually fewer in number than in 1881.

figure r: frequency distribution of Jewish density for 1881 and 1891 censuses, split between newly Jewish and existing Jewish streets within Leylands only.



This analysis has shown the formation of the density pattern in the Leylands area and has suggested a pattern whereby streets with existing Jewish populations are filled up faster than non-Jewish streets.

Section 3.3 has helped confirm the theories raised earlier, as to there being an identifiable pattern of the formation of Jewish settlement in the Leylands district. It has shown reasonable confirmation that the pattern is of intensification of settlement in existing streets (which tend to be more integrated) followed by settlement in less well integrated streets. The following section looks at social parameters to see if the spatial distinctiveness is due to the household structure and other social parameters of the immigrant district.

4. Spatial and Social Analysis

This section looks at the key parameters identified in chapter 6 relating to the social distinctiveness of Jewish settlement. Where available, comparison is made with non-Jewish immigrants in order to see whether the findings are more to do with the immigrant nature of the settlement or whether the findings are special to the Jewish population alone.

4.1 Analysis of Settlement by Parameters of 'Foreignness'

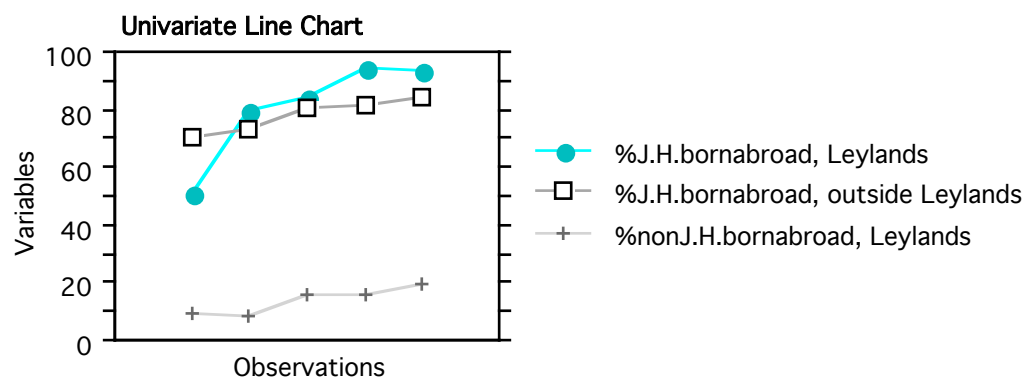
Two parameters of 'foreignness' are considered here: the percentage of heads or wives born abroad and the mean age of the eldest child born in Britain, of foreign-born heads or wives.

The following univariate line chart in figure s below, plots the percentage of Jewish heads or wives born abroad by census, ordered chronologically from left to right. It also compares the rate of foreign-born non-Jews within the Leylands district⁹. The 1841 results were too inaccurate to be included, since Irish born were not included in the definition of 'foreign born' by the enumerators of this census. We see in figure s

⁹A household was considered 'born abroad' if at least one of the heads or wives had been born abroad.

that there is a general trend for a higher percentage to be born abroad from census to census. However, the Leylands streets start from a lower percentage in the 1851 census and then overtake the outside Leylands streets to be constantly greater for the remaining censuses. Despite the reputation of the Leylands as being generally a district of immigrants, it is evident that the percentage of foreign-born non-Jews is considerably lower than foreign-born Jews throughout the five censuses shown here - making the immigrant component of this district principally one of Jewish immigrants in the period considered.

figure s: line chart showing percentage of heads /wives born abroad in each census, for Jews in Leylands, Jews outside Leylands and for non-Jews in Leylands. The x axis shows the mean 1851 to 1891 results from left to right. (1841 results are too inaccurate to be included).



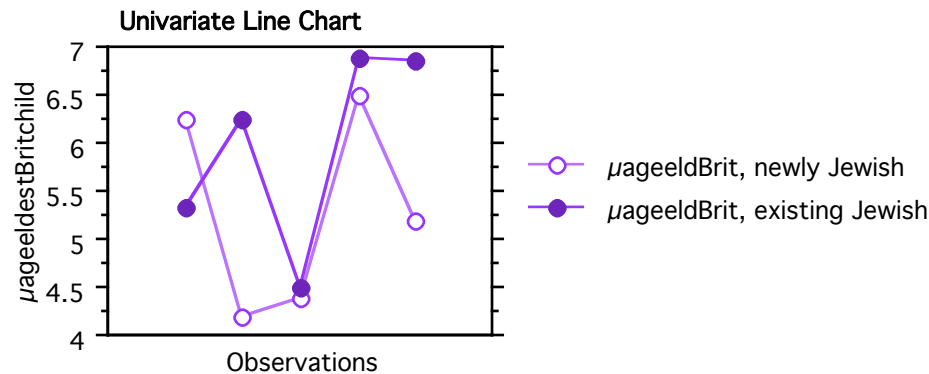
Another parameter used to measure foreignness was the age of the eldest child born abroad. As explained in previous chapters, the age of the eldest child born in Britain is an indicator of the minimum time that a family is likely to have spent in the country - the higher the age of the eldest child born in Britain, the longer the family is likely to have been in Britain. It was only calculated for families where the head or wife had been born abroad. It is a more accurate measure of foreignness, since it marks the time a family has been in the country according to a *son* or *daughter*'s age, which only in rare occasions was above 20 (whereas in the above measure, heads or wives could have been in the country for many more years). The results of this calculation is shown in plate 29, which shows the Leylands area through the six censuses coloured up by the age of the eldest child born in Britain, where the warmer the colour, the higher the age - and therefore the longer the foreign born family is likely to have been in Britain. Streets outside of the Leylands were not considered for this illustration and are simply coloured white, as are streets within Leylands for which data were not available (such as when there were no children or no ages shown). Several points emerge from this illustration:

- Starting from 1861, when a reasonably large settlement was established in the Leylands, it is evident that if we track the main streets through the censuses, we see that Regent Street and Bridge Street (the two long north-south streets in Leylands) start off with settlement by new immigrants (in the blue-green range), ten years later, they are in the 8 to over 10 years range and by 1891 have average ages of 7 to 9 years.
- The other main streets, those running east-west in the southern part of the district: Templar Street and Lady Lane, show a steady increase in mean age from 1871 onwards from around 5 years to 9 years to 10 years by 1891, yet the mean age does not go over 10 years.
- The infill streets - those that are newly settled in 1881 and those that are newly settled in 1891, tend to have mean ages of around 4 to 7 years in each case, whilst the streets already existing in the previous census tend to have mean ages in the higher age groups, in comparison to newly settled streets and in comparison to their state in the previous census.

Although it is difficult to make definite assertions about the meaning of these patterns, the patterns of the main streets suggest a situation whereby many of the original settlers stayed on for more than one census, but that there was a reasonable influx of immigration into those streets, which would have kept the mean age below the 10 mark (A mean of over 10 years would have suggested that only the original settlers stayed on); The pattern of the newly settled minor streets suggests that these streets were not the first place of residence for the immigrants - since then the mean age would have been much lower - and raises the possibility that between censuses some of the new immigrants were lodged elsewhere. The pattern of the existing minor streets suggests that many families were staying on for more than one census, since despite the fact that settlement intensified in each consecutive census, the mean age actually increased with time.

Analysis of plate 29 suggests a relationship between age of eldest child and new and existing Jewish streets. If we split the mean rates for age of eldest British child and born abroad for the existing and newly Jewish streets within the Leylands only, in order to see if new immigrants tended to prefer existing Jewish streets or new Jewish streets, we find the following in figure *t* below (1841 is missing from these plots due to the lack of clear data on place of birth in the earliest census). We see that in the 1851 census, newly Jewish streets tended to have Jewish families who had been in the country for longer than existing Jewish streets; this trend reversed in 1861, which a much larger margin between the two. In other words, by the third decade of settlement, existing Jewish streets had much longer standing settlers than newly Jewish streets (where families had been in the country for 2 years less on average). The following two decades showed only marginal differences, but the 1891 census, after a large influx of immigration, again shows a big difference with streets already settled by Jews having families which have been in the country for 2 years longer on average, than streets newly settled by Jews. In other words, these results help confirm the theory that new immigrants tended to settle in streets not already settled by Jews before - although this finding is only significant in years of high immigration:

figure t: line chart showing mean age of eldest child born in Britain to foreign-born head/wives in each census, split by existing and newly Jewish streets within the Leylands only. The x axis shows the mean 1851 to 1891 results from left to right.



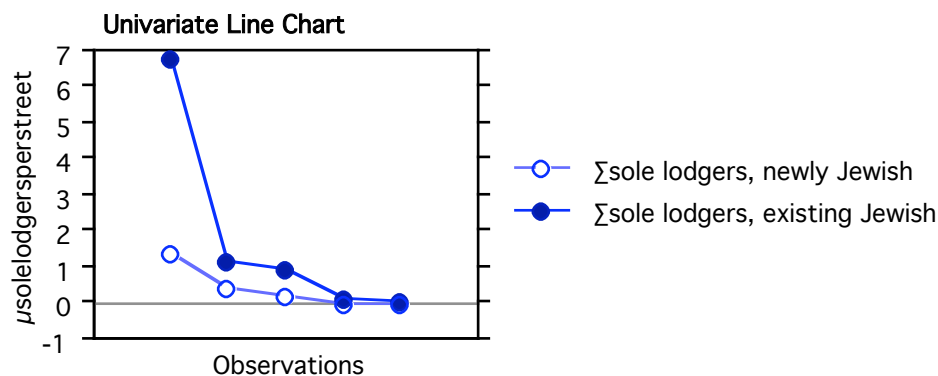
Analysis of parameters of foreignness has suggested that the settlement of Leylands became established through immigration, rather than secondary moves of Jews, since there were more foreign Jews in Leylands than outside Leylands in each successive census. Within the Leylands it was found that new immigrants tended to settle in streets not already settled by Jews but only in years of high immigration, otherwise they preferred existing Jewish streets. The following section looks just at sole lodgers to see if their pattern of settlement helps clarify this picture.

4.2 Analysis of Settlement by Sole Lodgers

Another factor contributing to the formation of immigrant settlement is the number of sole lodgers - Jewish individuals lodging in households with non-Jewish heads. As was explained in the literature review, many theories pertaining to immigrant settlements maintain that they are formed by single migrants coming ahead of their families, establishing themselves financially and then bringing over the remainder of the family. To test this theory, the proportion of sole lodgers within the total number of Jewish inhabitants was calculated in section 3.1 above, where it was found that the proportion decreased sharply from the earlier to the later censuses, only rising slightly in the 1891 census.

Following the same analysis as above, the mean number of sole lodgers per street was split between newly Jewish streets and existing Jewish streets. These results are plotted in the following univariate chart in figure u below, which shows mean rates within the Leylands only. The chart indicates a greater number of sole lodgers in existing Jewish streets than in newly Jewish streets in the three censuses where sole lodgers were predominant overall (1851, 1861 and 1871). The later censuses, where the number lessens close to nought, sole lodgers are spread almost equally in new and existing Jewish streets, although continue to be more in existing:

figure u line chart showing mean number of sole lodgers per street, split between newly Jewish and existing Jewish streets within Leylands only. The x axis shows mean values for 1851-1891.



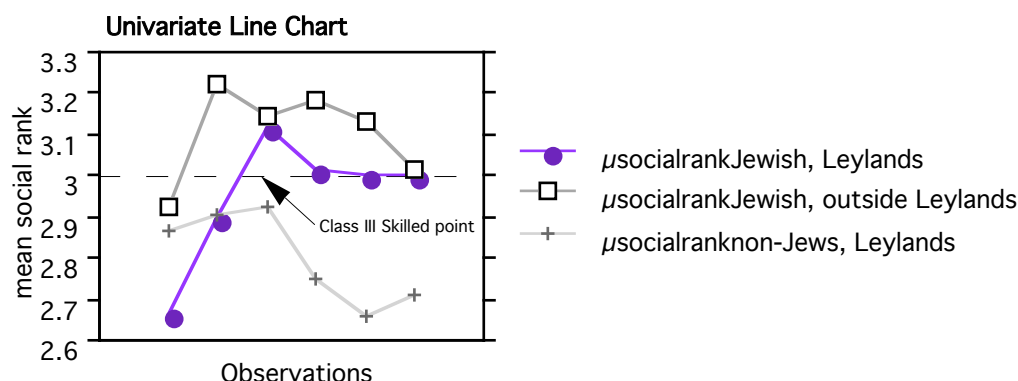
Considering that sole lodgers by definition, were single immigrants lodging with non-Jews, this finding suggests that in the first decades of settlement, sole lodgers settled wherever lodgings were available and not necessarily in streets already established as ‘Jewish’ streets - indeed, Jewish settlement was not at all dense in the early years and therefore it might have been difficult to point to a single core ‘Jewish’ area. In the middle years of settlement, once Jewish settlement was established, from 1861 onwards and was therefore dense enough to be identifiable - there was a tendency for sole lodgers to settle in streets with Jewish households. In other words, even if they were not lodging with their co-religionists, they were living close by. In the latter years of settlement, the numbers of sole lodgers were too low to be measurable, which probably indicates that by this time Jewish lodgers were finding lodgings mainly with their co-religionists.

4.3 Analysis of Social Class

The first indicator of social class used was classification according to occupation by the Armstrong system, as described in previous chapters, which assigns people to five social classes from Unskilled to Professional. The classification of the five classes was translated into a social ranking where the higher the ranking, the higher the class. It should be noted that in the case of sole lodgers living with non-Jewish families, the occupation of the lodger, not of the head with whom they were residing was taken into account when calculating Jewish social class. Following is a univariate line chart which plots the mean social rank for Jewish households inside and outside Leylands, ordered from 1841 to 1891 from left to right.

We see that the social class rate for Jewish inhabitants is constantly higher outside of the Leylands area than inside the area, although the rates are almost identical in 1861 and 1891. We also see that from 1871 onwards there is a trend downwards outside of the Leylands district, with a levelling out to the same rate inside of the Leylands district; in other words, as time progresses the difference between Jewish families inside and outside of the Leylands district narrows. In addition it is notable that within the Leylands district from 1871 onwards, the Jewish households approach a mean rate of 3 (marked by the dotted line) so are increasing their social class with time. The social rank for non-Jews within the Leylands suggests that other than in 1851, the Jews of the Leylands were in a higher social class than their non-Jewish neighbours.

figure v: line chart showing mean social rank in each census, for Jews in Leylands, Jews outside Leylands and for non-Jews in Leylands. The x axis shows the mean 1841 to 1891 results from left to right.



These results were tested statistically by taking all of the streets within the Leylands area and making t-tests of the difference between Jewish and non-Jewish households within the same street. The results are displayed in the following table.

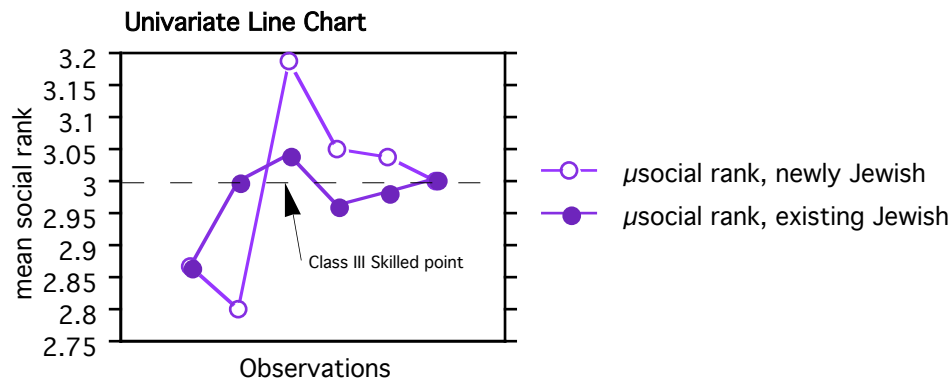
Table 3: Social Rank				
Comparison between Jewish and non-Jewish households, per census				
	Jewish	non-Jewish	μ difference, per street	t-test results
1841 census	2.667	2.868	-.202	insignificant
1851 census	2.900	2.906	-.006	insignificant
1861 census	3.119	2.924	.195	$p=.0393$
1871 census	3.018	2.750	.270	$p<.0001$
1881 census	3.004	2.661	.343	$p<.0001$
1891 census	3.003	2.710	.290	$p<.0001$

Table 3 shows that the difference between Jewish and non-Jewish households within the same street is insignificant in the first two censuses (this may be due to the small number of cases). In the first two censuses it is also notable that the mean social rank is below 3 ('middle-class'), especially for Jewish households. However, from 1861 onwards, the Jewish households are always marginally above 3, whilst the non-Jewish households are not and the difference between the two groups is significant in all cases (and tends to be greater with time). In other words, when comparing Jewish households with their neighbours within the same street, as time progresses they are significantly of a higher social class, when defined by occupation. Moreover, whilst the Jewish households are on average above social class 3, the non-Jewish households remain below. This raises the question of occupational structure - is this difference linked to the type of occupations undertaken by the two groups and does Leeds follow the pattern seen for Manchester, where the Jews were found to be in a much narrower band of occupations. This question is looked at in the following section.

In order to complete the picture of social class within Leylands, a split between newly Jewish streets and existing Jewish streets was made (according to the same methods used in the above sections). The result can be seen in figure w below, which suggests that the mean social rank for Jewish households in newly Jewish streets tended in the last 4 censuses to be greater than for existing Jewish streets in the same census. The margin between the two groups tends to narrow with time, with both groups approaching the median

point of Class III Skilled (marked with the dotted line). It is also notable that the social rank values in the 1841/1851 censuses are a reversal of these findings, with Jewish households in newly Jewish streets having a similar rank in the earlier census and a much lower social rank than in existing Jewish streets. This may be an indication of the fact that sole lodgers tended to be of lower social class and to settle in newly Jewish streets in the early censuses.

figure w line chart showing mean social rank per street, split between newly Jewish and existing Jewish streets within Leylands only. The x axis shows mean values for 1841-1891.

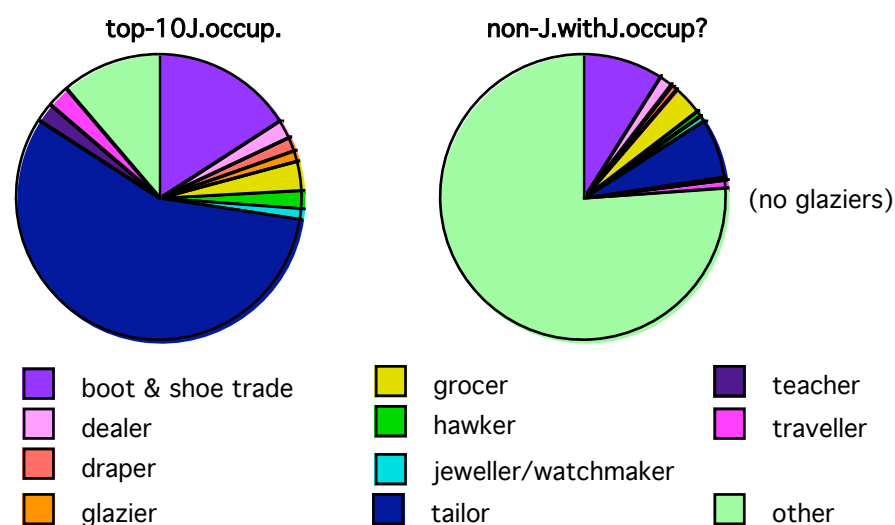


4.4 Analysis of Occupational Structure

The previous section indicated that within the district of Leylands, which was considered an area of poverty and of initial settlement for immigrants, there was a significant difference in social rank, as defined by occupation, between Jewish and non-Jewish households. In order to test whether this difference followed into occupational structure (as was found for Manchester 1881 in chapter 7), this was studied for the Leylands in all six censuses.

This was done by finding the 10 most common Jewish occupations in the Leylands households of 1891 and then analysing the frequency distribution of these occupations amongst the Jewish and non-Jewish households in turn, as can be seen in the pie-charts in figure x below. The pie charts show that a majority of Jewish heads in Leylands were occupied in the most common Jewish occupations, whilst only a quarter of non-Jewish heads were in the 10 most common Jewish occupations (and there were not any non-Jewish glaziers).

figure x: frequency distribution of the 10 most common Jewish occupations in the Leylands in 1891, split by Jewish and non-Jewish households.



Following is a table which gives the details of the pie chart distribution. Table 4.1 shows a repetition of the most prominent difference between Jewish and non-Jewish heads that was found in Manchester, namely a concentration of few occupations amongst the majority of Jewish heads. On the other hand, even though the non-Jewish heads can be found in most common Jewish occupations, this is the case for only 24% of non-Jewish heads, as compared with 88.9% of Jewish heads.

Table 4: Comparison between Jewish and non-Jewish common occupations in Leylands, 1891		
4.1 Common Jewish occupations (in percentages)		
OCCUPATION	Jewish heads	non-Jewish heads
boot & shoe trade	16.1	9.0
dealer	2.0	1.7
draper	1.4	.7
glazier	1.4	<i>no cases</i>
grocer	3.5	3.1
hawker	1.9	.7
jeweller/watchmaker	1.2	.7
tailor	56.9	6.7
teacher	1.9	.2
traveller*	2.6	.9
other	11.1	76.0
Total:	100.0	100.0

* traveller refers to travelling salesmen, and commercial travellers and does not include 3 hawkers or costermongers.

These findings were checked again by looking at the 10 most common occupations amongst non-Jewish heads in Leylands, as can be seen in the following pie-charts in figure y below. The pie charts show that only a third of non-Jewish heads were occupied in the most common non-Jewish occupations, whilst for Jewish heads the 10 most common non-Jewish occupations were a majority, but this was only due to the incidence of tailoring, which was common to the two groups and much more prevalent amongst Jewish than non-Jewish heads. We also see that for Jewish heads there are no boarding house keepers or charwomen.

figure y: frequency distribution of the 10 most common non-Jewish occupations in the Leylands, 1891, split by non-Jewish and Jewish households.



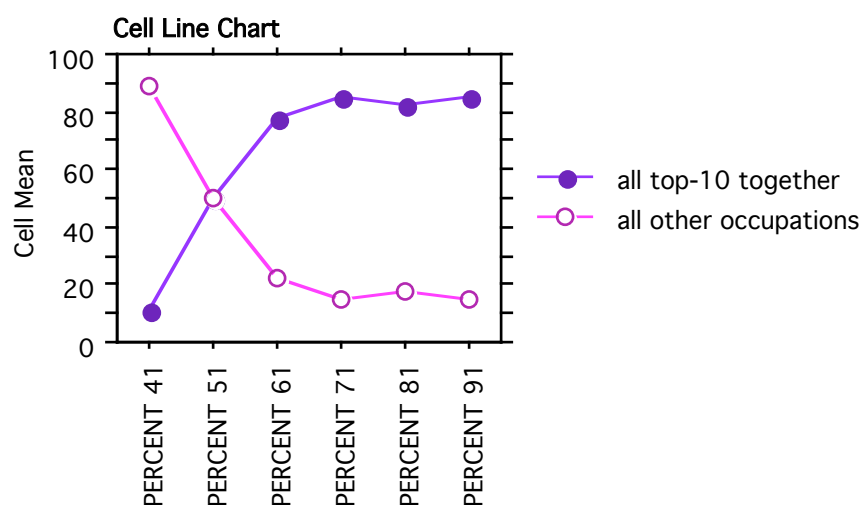
Table 4.2 below gives the details of the pie chart breakdown. Table 4.2 confirms the indications of the pie-charts, the majority of non-Jewish heads are not in the most common non-Jewish occupations.

Table 4: Comparison between Jewish and non-Jewish common occupations in Leylands, 1891		
4.2 Common non-Jewish occupations (in percentages)		
OCCUPATION	Jewish heads	non-Jewish heads
boarding house keeper*	no cases	1.4
boot & shoe trade	16.1	9.0
butcher	.9	1.7
charwoman	no cases	1.6
cloth trade	1.2	1.9
fruiterer/greengrocer	.2	2.7
grocer	3.5	3.1
joiner	.4	1.9
labourer	.5	6.6
tailor	56.9	6.7
other	20.2	63.3
Total:	100.0	100.0

* includes lodging-house and hotel keepers

Figure z below shows the frequency distribution of the top 10 Jewish occupations in 1891 in the six censuses, which was undertaken in order to track the formation of these occupations as central to the Jewish settlement. The cell chart below plots the frequency distribution of the 10 most common occupations against all other occupations for each census. We see that from 1861 onwards, the majority of Jewish heads worked in the 10 common Jewish occupations of 1891.

Figure z: line chart showing the occupations of Jewish heads split by their distribution in the top-10 Jewish occupations and in other occupations.



In conclusion, this section has demonstrated that the occupational structure of the Leylands was very similar to the parallel district in Manchester and that its reached this form by the third decade of settlement in Leeds, at the same time that the spatial structure became formed.

5. Summary and Discussion

The first analytical section of this chapter found a pattern of settlement in which the number of Jewish families and the number of Jewish streets increased with time; moreover, the findings suggested that Jewish settlement increased more in streets which already had an established Jewish presence. These findings suggest an important aspect to the development of the settlement in Leeds, that the formation of the settlement was created by an intensification of settlement in key streets.

The section found that Jews tended to live in more spatially integrated streets than average for the city overall, a finding which tends to contradict theories pertaining to the spatial segregation of immigrant settlement. However, when spatial values were weighted for the number of Jewish households in each street, it was found that Jewish households tended to be less well integrated than their immediate neighbours. Only the measure of depth from the most locally integrated street contradicted this finding, suggesting that Jewish households had local proximity to the spatial core, but were not as well integrated as non-Jewish households.

These findings were further confirmed by studying the change in spatial values from census to census, which found a tendency for spatial integration to decrease with time. The question of change over time was further investigated by comparing spatial values of newly Jewish streets with existing Jewish streets. It was found that Jews tended to move into streets with higher spatial values in the first few censuses and only in the last two censuses did streets which were inhabited by Jews for the first time, have less well integrated

streets than average. In other words, it could be maintained that the drop in spatial integration over time was due to the spreading out of Jewish settlement into less well integrated streets. These findings together required investigation of the question of how Jewish density was distributed spatially.

The analysis of distribution of Jewish density offered further confirmation of the theory of intensification of density proposed in this chapter, since it showed that whereas density increased more with time in the Leylands district, the proportion of Jewish streets from all Jewish streets did not increase as fast. Spatial analysis of density also suggested that axial distance from the main streets increased with density and in years with a big population jump, the population tended to become more distant from the main street in the district. This was also shown in analysis of the spread of settlement, which found that the increase in distance from the internal Leylands integrators and the 'ghetto wall' was greater for newly Jewish streets than for existing Jewish streets.

Analysis of time in the country offered further confirmation of this, showing that there was a greater proportion of foreign-born Jews in the Leylands than outside of the Leylands from 1861 onwards, both when measured by percentage of Jewish heads or wives, and when measured by the age of the eldest child born in Britain. It was also suggested that non-Jewish foreigners were dramatically fewer in number within the Leylands and had been in the country longer. The 'foreignness' differences between Jewish and non-Jewish immigrants suggest that where non-Jewish immigrants existed in the Leylands, they had been in the country longer. Analysis which compared newly Jewish with existing Jewish streets suggested a tendency for longer established families to be settled in the streets which were already established as 'Jewish'. It could tentatively be concluded from this and from the findings above that the spreading out of Jewish settlement was more due to immigration than from internal movements of longer-standing Jewish inhabitants of the district. Analysis of the distribution of sole lodgers showed that their numbers decreased over time, and indicated a trend in the early years of settlement to settle wherever lodgings were available, but in middle years of settlement, when Jewish settlement was established, there was a tendency for sole lodgers to settle in streets with Jewish households, although this trend was not discernible in later years when the number of sole lodgers became very low.

Analysis of social rank showed another time factor in the establishment of the form of Jewish settlement, due to the strong indications that social rank increased with each of the first three censuses, but from 1861 onwards there was a slow decrease to a rank of around 3. However, throughout the six censuses, Jewish households were classified by occupation in a higher social rank, on average than their non-Jewish counterparts - both within and outside of the Leylands. The difference between Jewish and non-Jewish households was found to also be statistically significant from 1861 onwards. Comparison of social rank between new and existing Jewish streets within the Leylands indicated that the fall in social rank in the last three censuses could be attributed to the newly Jewish streets; existing Jewish streets actually had an increase in social rank in the last censuses. This finding is notable if we consider that the increase in population in the last three censuses was concentrated in existing Jewish streets. It could be postulated that the Jews that moved into newly Jewish streets tended to be worse off and indeed, this theory concurs with

the finding above of greater numbers of sole lodgers (who tended to be of a lower social rank) moving into newly Jewish streets in the early censuses.

This chapter ended with analysis of the occupational structure of the Jews in the Leylands, in order to see if the differences found above between Jewish and non-Jewish households were maintained. This section found strong differences between the two groups, with a distinct concentration of Jewish occupations within a small band, in contrast with non-Jewish inhabitants of the same area. Moreover, the non-Jewish inhabitants of the Leylands were found to be much more diverse in their occupational spread and only shared a small percentage of occupations with the Jews. Even accounting for the fact that only a small number of non-Jews in the Leylands were foreign-born (and thus less likely to concentrate in a narrow band), this finding strongly suggests that the Jewish occupational structure was unusually lacking in diversity. This section also looked at the formation of this occupational band by studying the percentage of Jewish heads in the most common Jewish occupations, per census. This showed that in the first two censuses the Jews were occupied in a dissimilar range of occupations, although considering the small number of cases, this finding is not significant. On the other hand, from 1861 onwards, we find a steadily high proportion of over 80% of Jews working in the ten most common occupations of 1891.

Two points emerge from this chapter and are discussed in the final chapter of this thesis:

- Through studying the graphic representation of the data, this chapter has identified various patterns in the process of the creation of Jewish settlement in the Leyland district which was called the 'ghetto' of Leeds and has demonstrated that these patterns took shape and were identifiable in the third decade from when settlement there began. The findings on the intensification process of settlement and the distribution of density help to confirm the likelihood that there is a discernible manner in which Jewish settlement, and probably immigrant settlement in general, distributes itself around a district through time. This process is discussed and analysed in chapter 9.
- Analysis of the non-Jewish population of the Leylands has found socio/economic differences between this population and that of the city of Leeds overall, which mirror differences identified and noted in the previous chapters, that suggest that it may be the distinctiveness of the host community in the Leylands that made the area seem 'ghetto' like. These differences are summarised and discussed in chapter 9.

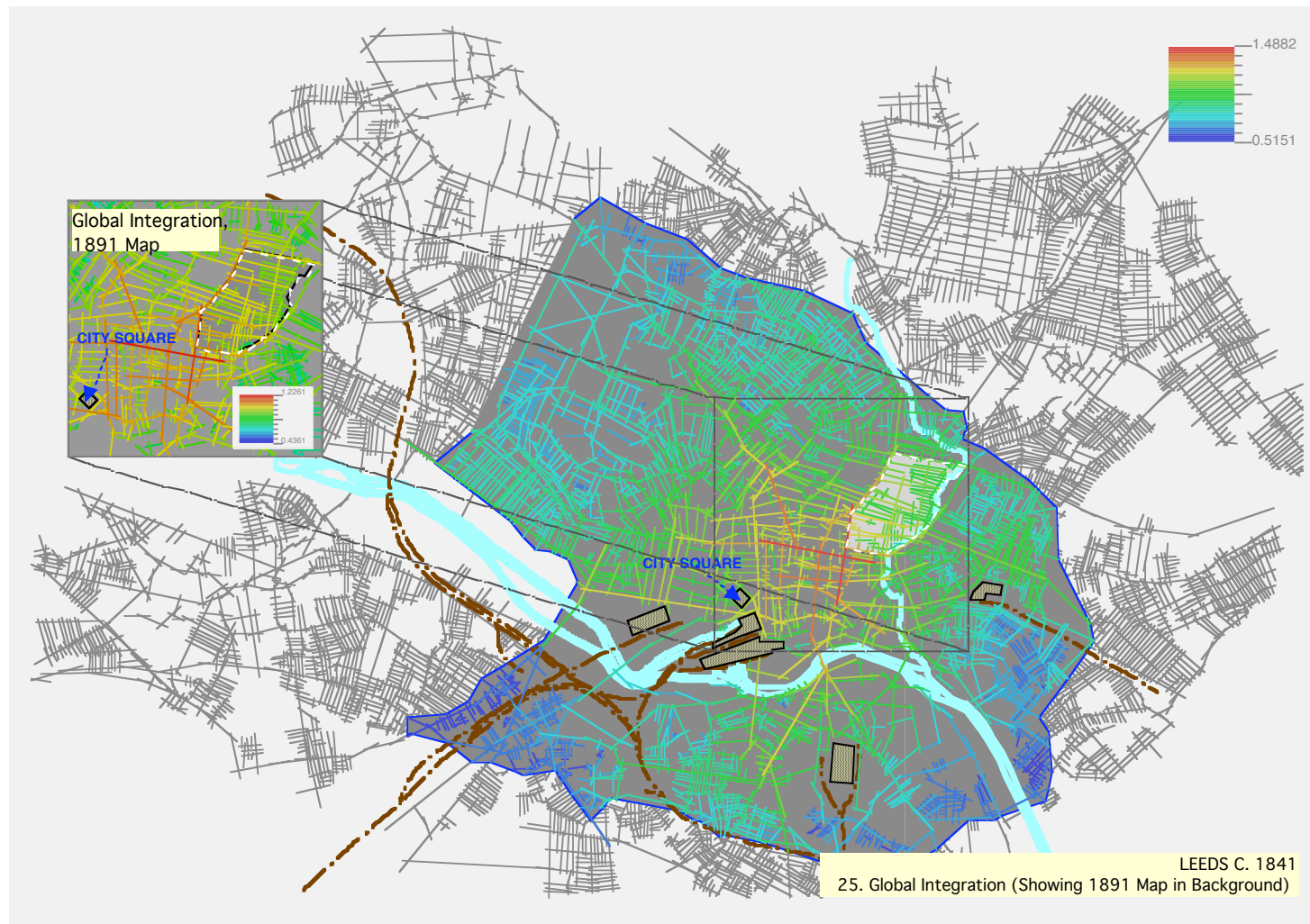


Plate 25: Leeds c. 1841 - Global Integration (Showing 1891 Map in Background)

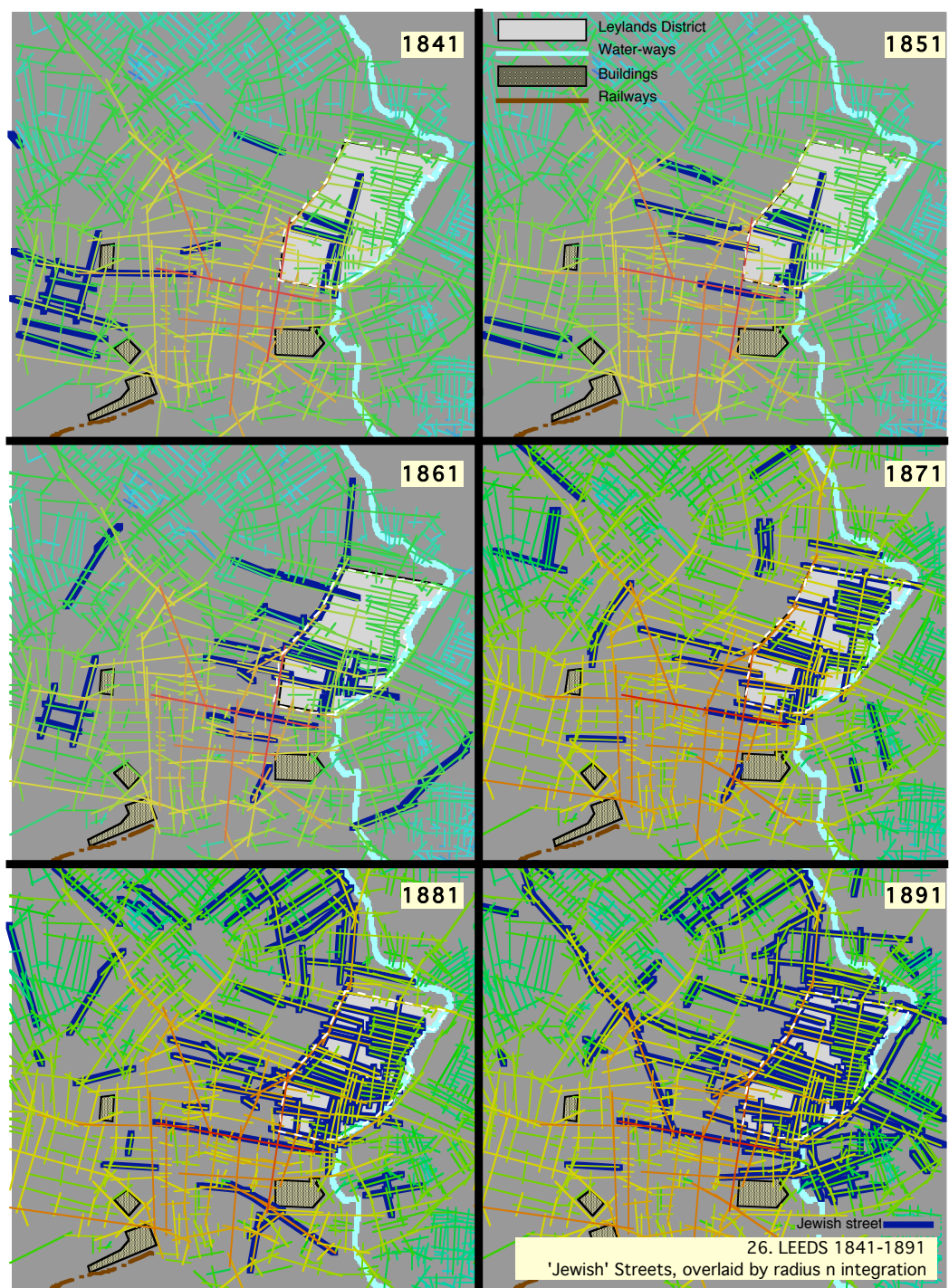


Plate 26: Leeds 1841-1891 - 'Jewish' Streets, overlaid by radius n integration



Plate 27: Leeds 1841-1891- 'Jewish' Streets, coloured up by density bands.

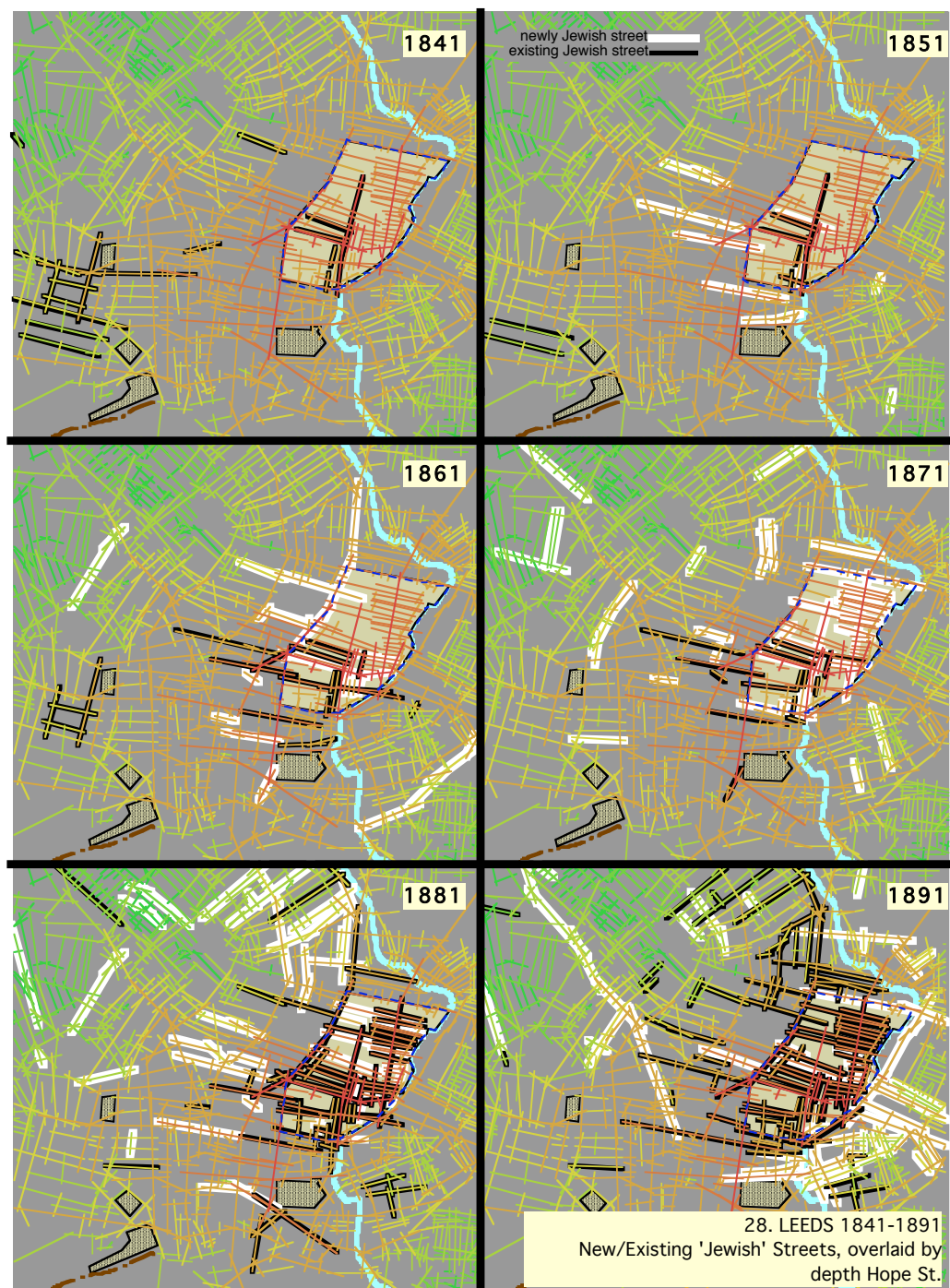


Plate 28: Leeds 1841-1891- New/Existing 'Jewish' Streets, overlaid by depth Hope St.

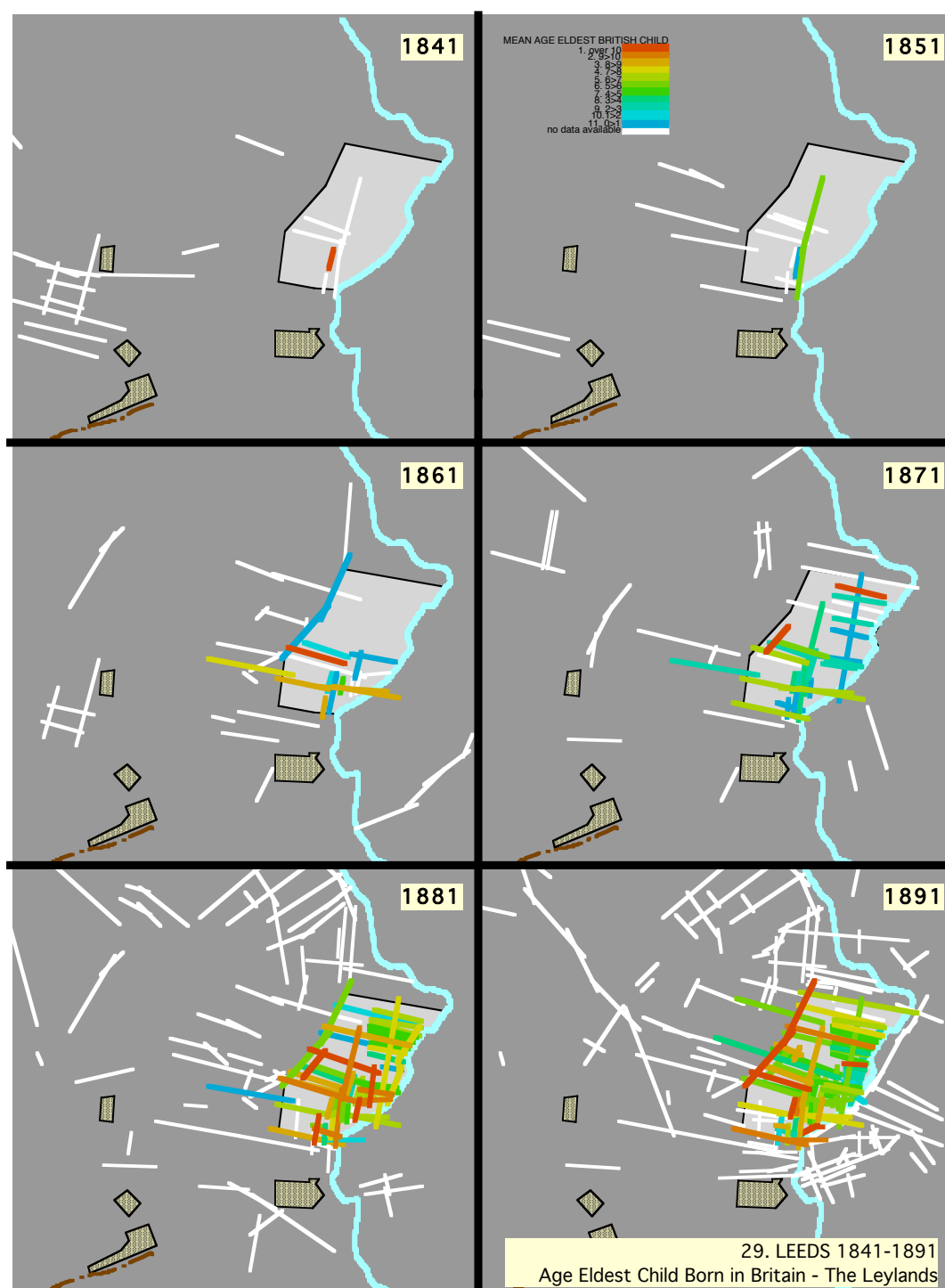


Plate 29: Leeds 1841-1891 - Age Eldest Child Born in Britain.

CHAPTER 9

Discussion and Conclusions

1. Introduction

The purpose of this chapter is to discuss the findings of the analytical chapters of this thesis in the light of the questions raised in the introductory chapters. The key questions were:

- How do we resolve the high degree of spatialisation of Jewish settlement with the fact that Jews are considered to have transpatial links - are there aspects of Jewish settlement which distinguish this group from other immigrant or minority groups?
- Does spatial segregation run in parallel to minority or immigrant clustering and is there a link between spatial segregation and poverty?
- Do immigrant or minority clusters follow theories regarding the 'outsider' in society; Is there a link between minority or immigrant clustering and occupational enclaves? And is there a link to a greater degree of self-help within the community in question?
- Do immigrant or minority clusters lessen their degree of ethnic density once immigrants have been in the country for more than a generation; is this situation different for some immigrant groups (who may be clustering for other reasons than immigrant factors).

This chapter starts with a review of the main findings of the analysis. Following are four sections, which discuss key issues of urban space that have emerged from the study: the first of which proposes a redefinition of the term 'segregation' with reference to immigrant or minority clusters; the second of which suggests the importance of co-dependence in promoting economic independence and cultural cohesion in immigrant settlements; the third of which postulates that there is a relationship between occupation, social class and urban form that makes some areas of the city more prone to clustering by minorities; the fourth of which notes that there is a discernible pattern to the formation of immigrant clusters which can be discovered through mapping forms of settlement.

2. Review of the Main Findings

Analysis of various aspects of the spatial nature of the Jewish settlement in Manchester and Leeds in the 19th century has shown that the findings are generally consistent in the two cases, a factor that strengthens the significance of the results.

2.1 Investigation of Segregation Within the Areas Considered 'Ghettos'

It can be suggested from the findings that the areas of high-density Jewish settlement, historically called 'ghettos', do fall into many of the preconceptions held about such settlements, especially with regards the relative spatial segregation of such settlements. However it has also been shown that the concept of segregation in general is not singular, rather is multifarious and refers to economic, occupational, physical and social and only some of these aspects can be found in the areas considered 'ghettos'. Moreover, when comparing the Jews with their non-Jewish neighbours within the areas, it has been shown that they differ from them in many of these aspects, even when only comparing immigrant groups.

- Jews were shown to be relatively spatially segregated when compared to their neighbours within the 'ghetto' areas but to settle in streets that were comparatively integrated overall. Segregation tended to correlate both with higher density and greater poverty. In addition, despite the relative segregation, the Jews were not cut-off overall, and had reasonable rates of intelligibility when considering the local to global street patterns. Further analysis of spatial parameters within the 'ghetto' area proposed a more general rule regarding patterns of settlement within such areas; that axial depth from the main local street structure is related positively with greater poverty - the poorer the family the more distant they are likely to be from the main streets. Analysis of the development of Jewish settlement through time suggested that this pattern had a temporal factor, in that more longer-established families tended to improve their spatial location by making moves to more spatially integrated streets.

This finding corresponds to previous studies on the economic characteristics of the 19th century city, see for example Carter and Lewis (1990), chapter 9, which suggest a positive link between location on the main streets of the city and greater prosperity.

- The Jewish families were found to differ from non-Jewish families within the main Jewish districts of each city, when considering the findings regarding axial distance from the exterior perimeter of the district (called the 'ghetto wall'). The analysis of this factor suggested that for the Jews, higher social rank was strongly related to proximity to the outside, and therefore to proximity to the greater global structure of the two cities. This finding leads to the tentative proposition that the pattern of settlement of the Jews within the 'ghetto' area was not uniform and that certain streets were preferred over others.

This finding seems suggest that Jewish settlement in clusters corresponds to the two-step logic theory of Hillier (1993), according to which in the 'traditional' - European pre-20th century city - there is a system of spatial organisation whereby the residential parts of the city are only two to three changes of direction away from the main streets of the city. According to Hillier et al, this is the 'means of linking the local to the global and achieving that compression of scales - the sense of being in a locally identifiable place and part of a much larger global system, at one and the same time...'¹. In other words, the more economically mobile parts of the Jewish community were able to make preferential moves to parts of the city that allowed them to be spatially integrated. Studies into the relationship between spatial integration and the location of successful retail outlets would suggest that such locations might benefit the occupational spread typical of the Jews. These findings are summarised by Hillier (1996), who suggests, firstly a link between the location of the various economic classes and spatial integration 'marginal separation by linear integration' - whereby the poorer classes are often in close proximity to the richer ones and are separated by being buried deeper within the urban block. Secondly, residential economic links are also, according to Hillier (1996) followed by retail and land-use links which make some streets better suited to retail uses due to the strong relationship between movement and grid structure. Thus, some shops are 'selectively located on integrating

¹ Hillier, B. and Penn, A. (1993) 'Natural Movement' *Environment & Planning B*; 20., p. 35.

lines, and this must be because they are the lines which naturally carry the most movement'.²

- Social class defined by occupation, was found to be greater for Jewish families than for non-Jewish families in the same street; it was suggested that this was due to an under representation of lower class occupations amongst the Jews, when compared with the non-Jews. In other measures of social class, such as household size, percentage of sharing households and the number of lodgers, the Jews were found to be worse off when compared with non-Jews within the high density areas. It was suggested that this contradiction could be due to the fact that the latter measures can be attributed to immigrant or minority status as well as poverty status and that it is their immigrant or minority status that had a stronger role in forming the household structure of the Jewish families.

The significance of this finding is that it bears out theories regarding the propensity of certain minority groups to have stronger 'community ties' than others, which cause them to cluster for other than economic reasons and beyond initial stages of settlement. These findings help define a measure for 'community ties', since they suggest that household size, sharing and lodging with co-religionists or people from the same minority group relate to social cohesiveness. (The question of whether community ties are a good or bad thing is one which is central to current debate regarding minorities and is discussed below).

- Co-dependence for foreign-born families (where lodgers or boarders tend to live with people from the same country of origin) was found to be significantly higher amongst Jews than non-Jews. Co-dependence for foreign born families was higher in the high density areas, which were areas of initial settlement for immigrants, this suggests that language or cultural co-dependence is a factor more important in the area of initial settlement. Co-dependence for occupation was also found to be higher amongst Jewish families; likewise co-dependence for both country of origin and occupation.

Taken together, these two findings suggest that since many of the factors typical of immigrant enclaves were stronger amongst Jewish immigrants, that it may be that other aspects common to this group influenced these findings. One of the explanations for this may be that the non-Jewish immigrants tended to have been in the country longer, and were therefore less in need of co-dependence. Yet, Jews were shown to continue to have features of co-dependence in areas of secondary settlement.

Co-dependence is strongly suggestive of a pattern of chain migration, in which - as explained in chapter 2 - newcomer immigrants seek assistance from long-standing inhabitants of an area. This pattern was confirmed by historical evidence in chapter 4, with sources suggesting: 'It will often be found that the master, in selecting his hands, gives a preference to his *'landsmann'* who hailed originally from the same town in Poland.'³ However, these theories do not explain why in the case of Jews, there were significantly many more cases of co-dependence than for other foreign-born inhabitants of the two cities.

One of the most likely explanations is the strong correspondence for Jews between work, prayer and country of origin, a factor for which there is strong evidence in the case of London, where 'the East End Jews of the working class rarely attended the larger synagogues... [and formed] themselves into associations (Chevrot)'.⁴ As explained by Glasman (1982), writing about the history of synagogues in London, many of the smaller congregations were members of the same economic group and the synagogues served as the social centres of the working groups, used by them 'as other workers have used pub or club' with additional functions in some cases, of benefit societies (Chevrot), which organised the collection of dues for payment in the case of sickness, temporary incapacity and old age. In some of these cases, as was the eastern

²Hillier (1996), p. 168.

³Russell and Lewis (1900), p.193. Landsmann is a person hailing from the same district or country.

⁴ Beatrice Potter reporting for Charles Booth, vol. 1, 1969, pp. 572-3, quoted in Fishman, 1988, p. 167.

European practice, the congregants of one synagogue might be made up of members of the same trade. This is confirmed by the historian Fishman, who writes:

‘the “Russian Poles” were “recognised as a separate and now very large section of the East End population”, with their own distinctive sub-culture...For they formed their own self-contained street communities...their ethnic unity perpetuated within their stieblach - small, house-based synagogues catering for the spiritual and social needs of the landsleit (families emanating from the same village or town in Russia or Russian Poland)’⁵

Another explanation for the especially strong ties between Jews from the same region, despite the fact that ostensibly most European Jews share a similar culture and language, is that many of the Jews studied here came from the Russian Pale of Settlement, where due to a high degree of oppression from the host society and government, Jews were especially prone to a strong sense of communal identity, according to Waterman and Schmool (1995), in their survey of ‘Literary Perspectives on Jews in Britain’. Waterman and Schmool state that due to the dislocation of East European Jews from their strongly formed communities, the previous milieu was recreated in the new location, including ‘the synagogue, the *cheder*, family structures and relationships’.⁶

These findings should still be considered with care, in the light of the considerable historical evidence which points to the fact that the Jews tended to discard their trades and crafts upon arrival in England. The fact that rates of familial co-dependence were found to be much stronger than occupational co-dependence suggests that it is principally the country of origin that was the factor in causing people to share with particular individuals, rather than their having a similar occupation.

- Occupation patterns were found to be significantly different for Jews when compared with non-Jews within the same area and with non-Jews within the city overall. Firstly, it was found that the notion that the Jews concentrated in a narrow band of occupations was true. But it was also found that the work patterns of this group were different - with the Jews tending to employ smaller numbers of people and the Jews within the area of initial settlement being least likely to travel long distances to work; whilst the more well established the Jewish secondary settlement, the more likely they were to travel long distances to work. It was also found that the occupational structure of non-Jews within the ‘ghetto’ area was less dissimilar from the city overall than for the Jews.

These findings correspond to the historical evidence presented in chapter 4. In addition, the lack of agreement identified in the historical chapter, whereby some sources placed most Jews in the working classes and others put them in the middle classes was somewhat clarified by the analysis, which showed that using the measures of class defined by occupation, there were many more Jews in the middle class (if we consider Class III skilled to be ‘middle’) than their immediate neighbours in the Red Bank and Leylands districts; on the other hand, measures of class defined by household structure were shown to present the Jews as being in the poverty classes - due to high rates of sharing households and so on.

Another point to consider with regard the definition of class is that the analysis of occupations in chapter 8 highlighted the move of Jews from 1861 onwards from hawking and costermongering into the retail (and small-scale manufacturing) trades. The theories of Markus (1993) regarding the key differences between markets and shops, allied to the differences between market traders and shopkeepers, highlight the significance of this transition. The key difference is that between transience and permanency; although the analysis of occupational structure has proposed that the Jews were still occupied in a very narrow band of occupations, Markus’ theories suggest that in the transition to shopkeeper status, the Jews moved to a higher social class and to a more permanent status:

‘The shopkeeper was likely to be a bourgeois property owner, resident near or above the shop, urban, skilled in a craft or with specialist mercantile knowledge.’ [Markus (1993), p. 306].

⁵Fishman, 1988, p. 133.

⁶Waterman and Schmool (1995), p. 194. *Cheder* = Hebrew school.

The results of the economic and spatial analysis of Jewish settlement may also suggest that the Jews' access to information was restricted by their relative short time in England. It is likely therefore that the Jews maximised sources of information by living close to their co-religionists. The same was the case for jobs (shown by number of people living with others in same job).

It is notable that the findings here of high rates of marriage between landsmann and of Jewish household structure in general, help fill a gap in the knowledge regarding Jewish settlement patterns identified by Englander (1994) who writes:

'was marriage between Polaks and Litvaks, Galizianers and Romanian immigrants, as rare as the literature suggests? We do not know... Myths about the Jewish family exist in place of systematic knowledge on marriage, household structure, kinship relations and residence patterns... Jewish family history is still in its infancy'. [Englander (1994), pp. 63-64].

2.2 Investigation of the Formation of Jewish Settlement

Analysis of the formation of Jewish settlement through time has shed further light on these aspects, suggesting that a relatively small core of settlement is sufficient to establish a pattern of settlement that is built on in later years by the same group. This analysis also proposed a pattern of distribution of settlement, whereby after establishing a core of settlement within an area, that streets already established become more densely settled by the minority, whilst new streets are established more slowly. Moreover, the pattern of ethnic density was found not only to increase with time on average, but during the periods of high immigration (between 1871 and 1891), density increased more in the spatially integrated streets than in the less integrated streets. Further analysis of settlement formation brought forth the finding that newly established streets tended to be settled more by new and poorer immigrants, rather than by existing Jewish inhabitants. Lastly, the occupational pattern of the Jewish settlement was found to have become established in parallel to the establishment of its spatial form, with the key 'Jewish' occupations becoming commonplace amongst the majority of the Jews in the Leylands district at a relatively early stage.

The question of what other aspects may have been brought to bear on the factors distinguishing Jews from non-Jews and immigrant Jews from immigrant non-Jews, is discussed in section 3 below.

2.3 Investigation of Secondary Settlement by Jews

The analysis suggested that the areas of secondary settlement - which were much more established in the Manchester case - do not conform to many of the stereotypes of immigrant or minority settlement; despite a degree of clustering, the Jews differ from their neighbours in some aspects, such as occupational, but are similar in others, such as socio-economic measures.

When studying patterns of secondary settlement, it was found that the Jews tended to settle in relatively well spatially integrated parts of the city and analysis of work patterns showed that the more well established the Jewish secondary settlement, the more likely they were to travel long distances to work. Yet, Jews were shown to continue features of co-dependence even into the areas of secondary settlement.

The findings regarding secondary settlement overall comply with those of Godley (1997), in his study of Jewish moves out of the area of initial settlement in the East End of London. Godley contends firstly that the moves were generally a result of improved economic conditions and secondly, that this took place in parallel to a greater integration into the London labour market.

3. Defining 'Segregation': a discussion of the spatial, economic and social meanings of the term.

The introductory chapters of this thesis highlighted the conceptual difficulties underlying the use of the term 'ghetto' and its allied meaning, 'segregated'. It was shown that 'segregation' can refer to economic, social, ethnic and spatial separation and that invariably it was assumed by studies of immigrant or minority clusters that one type of segregation brought about another. As suggested by Peach (1981), segregation can be a 'fuzzy concept', since it can be categorised by a lack of mix of population or by the isolation of a particular community with regards the remaining population; it can relate to the economic isolation (normally due to relative poverty) or to social, economic and ethnic divide (sometimes due to immigrant clustering).

As proposed above, this thesis has helped clarify the confusion regarding the 'segregating' characteristics of immigrant or minority settlement by showing that only some aspects of the spatial definition of immigrant settlement sustain the meaning of 'segregation'.

Analysis of the economic and social class aspects of the immigrant settlement has suggested that greater success according to these measures can be linked to the spatial form of the immigrant cluster. This finding is more striking when considering that at the time in question, the Jews had not achieved significant social assimilation within the area of initial settlement, although outside of the... 'ghetto... Manchester Jews... had achieved social acceptance, economic success and space in which to develop the complex and costly framework of a religious community'⁷.

Waterman and Kosmin (1987) propose a model for such a state, where economic integration into the middle class is coupled with non-assimilation and cultural autonomy. According to this model, the first generation of migrants takes advantage of the spatial structure to create a dynamic pattern of settlement which strengthens their economic abilities. In parallel to this, spatial clustering allows the maintenance of cultural institutions which are dependent on a population of a minimum size. It would seem that the spatial findings of this thesis concur with this model - both the tight clustering in the first stages and the positioning of certain trades to take advantage of the spatial structure of the city in order to take advantage of it. Moreover, it could be contended that the choice of occupations in themselves could contribute to this model, since the semi-autonomous nature of the tailoring workshops, which so predominated the occupations of the Jews of Manchester and Leeds, enabled rapid economic achievement in parallel to the location of the workplace in the safe confines of the home or the close to home location. This also enabled the unofficial employment of women and children: 'the seasonal nature of immigrant occupations forced many women to supplement the meagre and irregular earnings of their husbands... [some women] assisted their husbands or took in sewing or laundry, but these forms of labour usually remained confined to the home'⁸.

The centrality of trade in Jewish life, is indicated by Booth 'Jew is the seller and the gentile the buyer; Petticoat Lane [the principle market in the East End of London] is the exchange of the Jew, but the lounge of the Christian'.⁹ Booth seems to indicate that the market-place in Jewish society sits on the threshold between the interior and exterior worlds. It is the nature of transactions to equalise relationships and to transcend the barriers of society. It might also be maintained that the above quote suggests that Petticoat Lane was not only the encounter point between the society members, but also where the community made contact with the outside world.¹⁰ If we look at the study by Lee (1976) of Kalahari hunter-gatherers, we see that he also considers the importance of trade in reinforcing social relations in societies whose spatial connections have become diffuse (although he suggests a more pragmatic reason for maintaining relations between groups - the need to maintain relations that may be crucial in the future). He maintains that 'keeping up distant social ties against a possible future need and visiting neighbours who owe favours from previous years are only two of the factors that set hunter groups in motion... The trade item in the perspective is a facilitating device for maintaining relations that may be ecologically crucial over the long run'.¹¹

⁷See Williams (1985b), p. 75.

⁸From Tananbaum (1993), p. 185; see also Buckman (1983).

⁹Booth (1902), pp. 66-67.

¹⁰ Petticoat Lane is still considered a Jewish market to this day, despite the dispersal of most of its members to a far distance away.

¹¹ See Lee (1976), p. 96.

It could be suggested that the importance of the market-place in Jewish life is a result of the type of occupation traditionally chosen (or imposed upon) Jews, which is frequently: trade, banking, professions. This is referred to by Barnett:

The Jew... 'is essentially a town-liver, kept off the land for so many years and prevented by his Sabbath Laws from so many forms of labour, he has been driven to trade...' [In **Russell and Lewis (1900)**, XXIV.]

Wirth (1928) points out other causes for the Jewish tendency towards commercial business, such as mobility, adaptability and flexibility. In the rigid structure of a society in which people were tied to the land, the Jews took advantage of their exclusion from this position and their contacts to carve out a specialised place in the commercial world.¹²

This thesis proposes a new description of minority settlement that is more accurate than mere identification of a minority cluster within the indigenous population; it is hoped that the current fears of the creation of 'foreign ghettos' have been shown to be unfounded. First, since 'ghettos' are not necessarily enclaves and therefore minority groups may be spatially integrated even when located in a cluster; second that clustering may benefit immigrant populations by allowing self-help within the group; and third, that when immigrant 'ghettos' are located in key economic locations in the city, this may allow the population to improve itself by linking up with the existing market-place and thus becoming integrated economically.

4. Social Solidarity and Spatial Cohesion: a discussion of co-dependence in immigrant societies.

The findings of this thesis propose that there are aspects distinctive of Jewish settlement which make it differ from other immigrant populations in its patterns of settlement and its social and economic structures. The introductory chapters highlighted certain aspects of immigrant settlement that are common to both Jews and other immigrant communities, but also presented evidence that suggests causes for the Jews to take on immigrant enclave characteristics in a more apparent manner and beyond the initial stage of settlement. Following is a review of causes that distinguish the Jews from other ethnic groups, which may be the distinctive aspects in question.

It could be contended that the main feature distinctive of the Jews as a group, besides the fact that they are considered both a religious and a cultural minority, is their transpatial nature. The concept of transpatial societies is seen by Hillier and Hanson (1987), to be applicable to societies which transcend space through common culture, language and so on. A transpatial community is any sort of social grouping that is not necessarily constantly spatialised, such as professional groups, political groups, etc.

4.1 Spatial and Transpatial Solidarities: Cultural

All of the solidarities mentioned by Hillier and Hanson above occur within the Jewish community: a diverse culture (both religious and secular); a different language - even in the assimilated community of 20th century Britain, it is common to find the Yiddish vernacular used amongst the Jews; even different food and general eating patterns distinguish the Jews:

'The segregation of the Jews can in part be considered not a result of external pressure but due to needs arising from their own religious customs, particularly their own ways of preparing food, the demands of attendance at a synagogue and the need to take part in the various aspects of communal life...' [Carter (1983), p. 180].

[...the mass movement of Jews of the late nineteenth century from Eastern Europe to America and Western Europe] 'had an enormous impact on the Jewish communities they joined.. and it radiated the styles of cooking of the countries they came from throughout the world'. [Roden (1997), p. 39].

¹² Wirth (1928), p. 24 and 78.

The results of this analysis suggest that the same specifically Jewish social/spatial solidarities that tie them to a specific locale, also allow Jews from other lands to tie into place successfully, since the strong ties to neighbourhood synagogue and other religious facilities (or simply by distance to Jewish schools and cultural facilities for the less religious) can also tie one local community to another. Since Jewish culture is linked transpatially by a common language of prayer, and in many cases also by a common vernacular (Yiddish among Ashkenazi Jews and Ladino among Sephardic), any Jew visiting another from abroad would be capable of using his cultural knowledge as an entry point into the local Jewish society. In addition, this knowledge could be used to gain assistance in work and accommodation in the 'new land' to a much greater degree than other immigrant groups:

'Their choice of domicile depends on the friends or fellow townsmen they expect to see, and to whom they had probably previously written' [Englander (1994), p. 112 from 'The Jewish Immigrant', *Contemporary Review*, 1899, p. 426].

Another distinction between Jewish society and other immigrant groups is that the latter generally had legal ties to another country, whereas until the establishment of the state of Israel, Jewish society as a global entity only existed as a totally transpatial element, since it had no defined territory. Among immigrant groups in general transpatial solidarities are reinforced by connections based on a common land of origin, especially among immigrants of the first generation. However, it is apparent that for the Jews, the transpatial solidarities are maintained even beyond the first generations.

In addition, as noted by Dan Miron (1996) in a paper on modern Hebrew literature, it is likely that the Jews of 19th century England had in common a mental map of a second city of inhabitation: Jerusalem - a city that was part of the 'mental universe' of all Jews brought up in the Jewish tradition¹³ and religion. The essential part of Jewish religion, its calendar of festivals and fasts, could be seen as an example of local reinforcement of the community through religious celebration. However, it could also be argued that the Jewish calendar acts as a link to other Jews across the world, who all celebrate the seasons of ancient Palestine at the same times throughout the year, by for instance praying for rainfall after the Autumn harvest festival (Succoth), at a time which is concurrent with the commencement of the rainy season in the Land of Israel and similarly praying for a cessation of rain during the Spring (Passover) festival.

Wirth (1928) also demonstrates the point of linkage between the transpatial and spatial communities - the synagogue. This was the place where strangers often dropped in to tell tales of distant lands...:

'The Jewish communities thus came to share the life of their distant co-religionists...In fact, for a long time the Jews were the intellectual intermediaries between Orient and Occident.' [Wirth (1928), p. 36].

4.2 Spatial and Transpatial Solidarities: Economic

A social structure which possesses strong networks, even trans-national networks, will be drawn towards trades that can benefit from information flows - it is therefore not surprising to find that the Jews are disproportionately represented in the mercantile trades. Even in the pre-emancipation years, when the Jews were confined by law to 'ghettos', rather than clustering by choice, it was typical to find their settlement close to the arteries of commerce or in the vicinity of the market. It could be argued that the Jewish transpatial connections, utilised for their economic strength, and having been transformed into trade, then take on a spatial aspect - the market-place. Other studies of the immigrant economy and the over preponderance of entrepreneurship amongst such people, confirm that overseas links help strengthen this part of the economy. For instance in a recent study of mid-nineteenth century Jews in Louisiana, evidence is presented on the importance of business connections among Jews, for example, between rural traders and those in New Orleans:

'... many of those who were [successful] had the good fortune to have ties, based either on family relations or European place of origin, with others in the Louisiana community or in New York.'¹⁴

It should also be noted that the causes which make business occupations common amongst the Jews seem to

¹³Miron (1996), pp. 242-3.

¹⁴Elliott Ashkenazi, 'The Business of Jews in Louisiana' (Tuscaloosa and London, 1988), p. 13 and *passim* quoted in Pollins (1989), p. 261.

lessen with the third generation of immigrants, who tend to pursue the professions instead. Pollins (1989) contends that the economic behaviour of the Jews is 'largely influenced by the environments they found themselves in' and once they are not restricted in their economic activities, will diversify as much as the general population. This trend had certainly not developed to an apparent degree in the communities studied here, but is evident in studies of Jewish settlement in the 20th century quoted in this thesis.

It could be contended that another cause of the high degree of occupational divide amongst the Jews was caused by their position on the edge of society, which has been exploited since mediaeval times when they were frequently chosen to be the physicians and emissaries of rulers and princes. As suggested by Wirth, the Jews were 'the typical stranger, and in that role they acquired the objectivity and built up the relationship of the confidant, which served them well as counsellors and diagnosticians.'¹⁵ Even today the Jew sometimes sees himself as rootless:

'I remembered someone in a Cambridge common room pestering the self-designated 'non-Jewish Jew' and Marxist historian Isaac Deutscher, himself a native of this country, about his roots. 'Trees have roots,' he shot back, scornfully, Jews have legs'. [Schama (1995), p.29].

The fact that Jews tend to be much more urbanised than others coupled with the differing variants of ghetto-like behaviour seem to comply with current theories on the nature of cities. For instance, Hannerz (1980), contends that the city is composed of varying degrees of 'encapsulation'; ethnic neighbourhoods are typical of encapsulations since if they are the outcome of chain migration, individuals tend to recruit others of the same type (or from the same country of origin). This may be a partial explanation of the findings regarding the greater measures of co-dependence, since co-dependence is a factor that is more likely to be important to people whose background is highly dissimilar to that of the host society, such as the Jews of the 19th century.

Possibly also more subtle factors must be considered when proposing a relationship between spatial segregation and minority clustering, such as the desire of the minority to hide from critical eyes - or the desire of the majority not to see the minority.

4.3 Minority Cohesion - A Good Thing?

Some of the sources in the introductory chapters pointed to the potentially positive aspects of spatial segregation of minority groups, in that they can help maintain religious and cultural cohesion of the minority culture - if so desired. It is found in the statement by Boal (1978) in his discussion of the functions of the ethnic cluster, that clustering helps contribute to social cohesion. He describes one of the aspects of the ethnic cluster as a 'haven' - a place that the minority can use as a port of entry; 'an environment of relatively low pressure for social adaptation and change'¹⁶.

As mentioned above, these notions are central to current debate regarding whether countries should be seeking to integrate minorities into a host culture or whether cultural separation benefits society. This debate is reviewed in Chisholm (1990), who suggests that if we consider the global nature of British society, the subject discussed in his paper, it may be beneficial to reconsider the 'aim to encourage the assimilation of the minority groups by the majority, host community'. The global city is a description currently given to such cases as London, New York and Tokyo, where cities offer specialised services for complex economic organisations; financial innovations and markets central to the internationalisation and expansion of the financial industry and where numerous ethnic communities congregate as a result.¹⁷ After discussing the spatial and cultural integration of various minority groups in Britain today, Chisholm suggests that the best means for achieving cultural integration is a recognition of differences and adopting policies which allow for distinctiveness to be maintained, so long as actual discrimination does not take place as a result.

Contemporary theories on migrants in the 'global city' suggest that the Jews are not alone in the pattern of transnational connections. For instance, the sociologist Eade (1997a), in the book 'Living the Global City:

¹⁵ Wirth (1928), p. 78.

¹⁶ Frieden, B.J. & Morris, R. *Urban Planning and Social Policy*, excerpt from chapter 4, © Basic Books, Inc., Publishers, New York in Boal (1978), p. 62.

¹⁷ See Sassen (1991), p. 5.

globalisation as local process', suggests that minority groups in a global city such as London may seek to 'transgress national boundaries' in order to identify with a 'superordinate global community'. Thus, minority groups may adapt their identity to the locale on the one hand, but use their global connections to link to cultural resources on the other.¹⁸ In another recent paper: 'Bangladeshis in a Global City', in Kershen (1997), Eade suggests that according to the model of the 'global city', minorities are not necessarily tied down to a specific location and use economic mobility (through the possession of translatable skills) to transcend space:

'For those who identified strongly with Islam 'home;' could not only be Bangladesh but any country where an Islamic state had been established'. [J. Eade in Kershen (1997), p. 102.]

However, Eade is quick to qualify his interpretations of interviews with first and second generation Bangladeshis in London from the implication that his sample represents the group as a whole. Eade suggests rather, several possibilities: that global connectedness is part of a strategy of 'keeping options open' which meant that the more highly educated second generation could aspire to return to Bangladesh, to move to the Middle East (in order to fulfil spiritual or religious needs) or simply to move elsewhere in the West.

5. Spatial Cohesion and the City: a discussion of the relationship between occupation, social class and the location of minorities in the city.

Chapter 4 of this thesis pointed to the fact that both in Manchester and in Leeds the areas of initial settlement, historically considered 'ghettos', were identifiable geographically. Other socio-economic distinguishing characteristics were identified, such as availability of housing and employment opportunities. Analysis in the following chapters led to findings on the social and economic characteristics of the areas which indicated that when comparing Jews to non-Jews within the Red Bank and Leylands districts that most of the non-Jewish population were poorer than average, even when compared to their (Jewish) immigrant neighbours and that there was a relationship between spatial characteristics and poverty. Not only were the Jews shown to be different from their neighbours in the 'ghetto' districts and in the city overall but also the non-Jewish inhabitants of the areas of high-density Jewish settlement were shown to be socially worse off than in general. The key difference between Jews to non-Jews within the Red Bank and Leylands districts were as follows:

- non-Jewish households were located in more spatially integrated streets on average, but detailed analysis suggested that the poorer non-Jewish households tended to be located in the interstitial streets of the districts.
- non-Jewish social class, as defined by occupation, was consistently lower for non-Jews. It was proposed that the difference was due to a greater proportion of non-Jews in class IV and V occupations, such as servants, carters, labourers.

¹⁸ Eade (1997a), p. 18.

- Other economic measures for non-Jews also indicated a higher degree of poverty, especially the number of servants; although measures of household structure did not sustain the findings - there were fewer cases of household sharing amongst non-Jews and they had smaller households, on average. The latter findings did not lead to the conclusion that non-Jews were better off, since it was suggested that sharing is more a factor of communal cohesion than economic necessity, borne out by identical numbers of lodgers in Jewish and non-Jewish households alike and by the much lower rate of co-dependence (sharing with someone from the same country) amongst non-Jewish foreigners.
- Analysis of the Leylands district through time suggested that non-Jewish social class as defined by occupation, decreased progressively with time, whilst the reverse occurred in the case of Jewish households within the same street.

These findings led to the proposition that the 'ghetto' is defined by the spatialisation of class characteristics of the non-immigrant (in this case non-Jewish) community who are just as distinguishable from the general population, due to their poverty, as are the Jewish immigrants due to their 'foreignness'. This supposition is strengthened by the findings on the relationship between poverty and spatial segregation for both Jews and non-Jews and the findings on the development of settlement in Leeds, whereby the social class of non-Jews seemed to worsen in time. These findings suggest a pattern of behaviour in which preferential moves were made by those who had economic and social mobility, leaving behind those who could not and are further strengthened by the historical sources presented in chapter 4, which suggested that the districts in question were perceived as 'slum areas' even before they were settled by the Jews. This seems more likely when we consider that first, the Jews were never a majority in the districts in question and second, that historical evidence points to those districts as having continuously attracted different waves of immigration. (As is the case in the East-End of London - where Spitalfields has seen Huguenots, Jews and now Bangladeshis pass through its streets).

These conclusions recall the theories of Hillier (1996) on sink estates in modern cities, whereby certain areas get a 'bad name' due to their propensity to crime and other social pathologies. Hillier further contends that the ever increasing spiral of neglect to which such areas are prone is partly due to a bad use of space (by assigning disadvantaged communities to congregate in an area and the following self-selection of the more skilled who move out) and partly due to the fact that the spaces (housing estates) in question are spatially disadvantaged from the start, with a segregated 'patterning of space and its consequent effects on the pattern of co-presence and co-awareness' that leads the areas to be prone to poverty and crime.¹⁹ This model suggests that the socio-economic form of the areas of settlement in Manchester and Leeds was not only created by the Jews or other immigrant groups but by default, by the English born and the non-Jews in the area and that certain areas of the city are especially prone to such self-selection, due to their spatial and economic characteristics that make them firstly, tend to be economically unsuccessful due to their spatial segregation and secondly, less attractive to those who have the means to move elsewhere.

6. Conclusions: Mapping the Form of Jewish Settlement in Manchester and Leeds

This section proposes that there is a discernible pattern to the formation of immigrant clusters which can be discovered through mapping forms of settlement.

Analysis of the formation of Jewish settlement in Leeds through time found several identifiable patterns:

¹⁹Hillier (1996), chapter five: 'Can Architecture Cause Social Malaise?', esp. pp. 210-212.

- The number of Jewish streets increased with time and Jewish settlement increased more in streets already settled by Jews.
- Jews tended to move into more spatially integrated streets as time went on, until they reached a stage of high density and then, it seems that mass migration overrode the desire to be spatially integrated and Jewish settlement spread out into most of the streets in the Leylands district (although some streets continued to be wholly non-Jewish) and that this was mostly due to new immigration rather than internal moves by existing Jews.
- Economic analysis suggested a pattern (which seems to follow the geographers' model of chain migration) of initial settlement of individuals wherever lodging and employment opportunities were available. After this, family immigration takes place and households with immigrants at the head start to become more common. At this stage the occupational structure also takes form with certain occupational niches being identified and established by the immigrant population. The following years show a process of intensification of settlement in streets already established by the minority, with a preference for streets close to but not on the main thoroughfares, although immigrants with less economic choice may settle further within the district. Finally, dispersal outside of the original area of settlement takes place.

The process of change through time identified by this analysis helps confirm the patterns of Jewish settlement suggested by Russell and Lewis (1900) among others, who write (regarding the map of Jewish East London):

'The gradual spread of the Jews, due partly to immigration and partly to the normal increase of a prolific people, has followed what may be termed the path of least resistance. From Whitechapel the out-flowing wave has moved along the great highways... and into the streets immediately off these thoroughfares. In streets not directly connected with the main roads, and not readily reached, the influx has been slow and is comparatively recent... The same tendency to spread along the main thoroughfares is seen in the outlying portions [with] smaller waves... out-flowing'²⁰

The importance of the map for recording statistical information has been noted by the historian Newman (1985), who writes that by studying the map (of Jewish East London) it is 'possible to chart waves of migration...' Topalov (1993), in his text on the Booth maps of poverty in London, also contends that 'unlike a written text, but like a painting or an engraving, a map is a look which is offered to other looks....'²¹ In order to benefit better understanding of the form of Jewish settlement, the ethnic density data of this thesis were translated into map form as well as being used statistically. The graphic depiction of Jewish relative density was made in the illustration of the change in Jewish settlement in Leeds through time (in plate 27 in chapter 8) and was also used to create maps of 'Jewish Leeds' and 'Jewish Manchester' (see plates 18 and 21 at the end of chapter 5) that are directly comparable with the classic map of 'Jewish East London' created by G. Arkell for the book 'The Jew in London' by Russell and Lewis (1900) (see reproduction in plate 1 at the end of chapter 1). Arkell's map is considered to this day to be a key 'instrument of research' into studying the Jewish population of London - as is pointed out by the historian Aubrey Newman (1985), since it not only charts the location of the Jewish population at the time, but analyses its relative proportion within the general population. It is hoped that the maps created here will be equally beneficial.

Clearly the data gathering process of this thesis would have been almost unachievable without the data on the location of Jewish households provided by Bill Williams and Murray Freedman, which made it possible to identify Jews reliably. But it is also notable that the process of data gathering in this thesis, which collected and collated data on all the population in the principal areas of Jewish settlement in the cities

²⁰Russell and Lewis (1900), notes on the map, page xl.

²¹ Topalov (1993), p. 409.

studied, has increased the knowledge regarding the settlement patterns of the Jews in Manchester and Leeds as well as the human geography of the Red Bank and Leylands districts of those two cities. In this way, this thesis has made more information available on Jewish settlement and poverty settlement in England than has been the case up to now.

Bibliography

Note: Data-Sets (computerised and hand-written) are marked in green.
Maps are marked in blue.

- Abelin, T., Brzezinski, Z. and Carstairs, V.,** (Eds.) (1987) *Measurement in health promotion and protection* - WHO regional publications. European series; no.22, Copenhagen, World Health Organisation, Regional Office for Europe.
- Alexander, C.** (1966) 'A City is Not a Tree' *Design Magazine*; 206 : pp. 46-55.
- Anderson, M.** (1971) *Family Structure in Nineteenth Century Lancashire*; Cambridge, Cambridge UP.
- Armstrong, W. A.** (1972) 'The Use of Information about Occupation' in *Nineteenth Century Society: essays on the use of quantitative methods for the study of social data*; Ed. Wrigley, E. A. Cambridge, Cambridge University Press, pp. 191-310.
- Boal, F. W.** (1978) 'Ethnic Residential Segregation' in *Social Areas in Cities: processes, patterns and problems*; Eds. Herbert, D. T. and Johnston, R. J. London, Wiley, pp. 57-95.
- Booth, C.** (1902) *Life and Labour of the People in London*; London, Macmillan.
- Bourdieu, P.** (1977) *Outline of a Theory of Practice*; Great Britain, Cambridge University Press.
- Brewer, M.** (1892) 'The Jewish Colony in London', from 'The Sunday Magazine', XXI,' in *A Documentary History of Jewish Immigrants in Britain 1840-1920*; Ed. Englander, D. Leicester, Leicester UP, pp. 69-75, 1994.
- Buckman, J.** (1983) *Immigrants and the Class Struggle: the Jewish Immigrant in Leeds 1880-1914*; Manchester, Lancs, Dover.
- Bullock, N. and Dickens, P.** (1975) 'Use of Models in Planning' in *Urban Space and Structures*; Eds. Martin, L. and March, L. Cambridge, Cambridge UP, pp. 97-112.
- Burton, N.** (Ed.) (1996) *Large Scale Ordnance Survey Maps: Manchester (City Centre), 1849; scale 1 yard = 1 mile; Ordnance Survey Sheet no. 28, Gateshead, Alan Godfrey Maps.*
- Calliandro, V.** (1978) 'Street Form and Use: a survey of principal American street environments' in *On Streets*; Ed. Anderson, S. Cambridge, Massachusetts, MIT Press, pp. 151-185.
- Cambridge** (1996) *Table H1 Household Heads and Heads of Familial Inmate Groups by Occupational Group*; Cambridge, Cambridge Group for the History of Population and Social Structure.
- Cannadine, D.** (1982) 'Residential Differentiation in Nineteenth Century Towns: from shapes on the ground to shapes in society' in *The Structure of Nineteenth Century Cities*; Eds. Johnson, J. H. and Pooley, C. G. London, Croom Helm, pp. 235-251.
- Carstairs, V. and Morris, R.** (1990) *Deprivation and Health in Scotland*; Aberdeen, Aberdeen University Press.
- Carter, H.** (1983) *An Introduction to Urban Historical Geography*; U.S.A., Edward Arnold.

- Carter, H. and Lewis, C. R.** (1990) *An Urban Geography of England and Wales in the Nineteenth Century*, London, Arnold.
- Castells, M.** (1977) *The Urban Question: A Marxist Approach*; London, Edward Arnold.
- Cesarani, D.** (1998) 'A Funny Thing Happened on the Way to the Suburbs: Social Change in Anglo-Jewry Between the Wars, 1914-1945' *Jewish Culture and History*; 1 (Summer 1998): pp. 5-26.
- Cesarani, D.,** (Ed.) (1990) *The Making of Modern-Anglo Jewry* Oxford, Basil Blackwell Ltd.
- Chance, J.** (1987) 'The Irish in London: an exploration of ethnic boundary maintenance' in *Race and racism: essays in social geography*; Ed. Jackson, P. London, Allen & Unwin, pp. 142-160.
- Chisholm, M.** (1990) 'Britain as a Plural Society' in *Shared Space, Divided Space: essays on conflict and territorial organisation*; Eds. Smith, D. M. and Chisholm, M. London, Unwin Hyman, pp. 266.
- Cohen, A. P.** (1989) *The Symbolic Construction of Community*, London, Routledge.
- Cordasco, F.** (1968) *Jacob Riis Revisited: Poverty and the Slum in Another Era*; New York, Doubleday.
- Culling, J.** (1996) *Occupations: a preliminary list*, Birmingham, Federation of Family History Societies (Publications) Ltd.
- Dale, P.** (Ed.) (1992) *Large Scale Ordnance Survey Maps: Manchester (Victoria), 1849; scale 1 yard = 1 mile*; Ordnance Survey Sheet no. 23, Gateshead, Alan Godfrey Maps.
- Dalton, M. and Seaman, J. M.** (1973) 'The Distribution of New Commonwealth Immigrants in the London Borough of Ealing, 1961-1966' *Transactions, Institute of British Geographers*; 58 : pp. 21-39.
- Dalton, N.:** (1997) *AxmanPPC2.5d - AxMan Form & Function Application*; computer application programme - Space Syntax Laboratory, University College London, London.
- Dennis, R.** (1982) 'Stability and Change in Urban Communities: a geographical perspective' in *The Structure of Nineteenth Century Cities*; Eds. Johnson, J. H. and Pooley, C. G. London, Croom Helm, pp. 253-281.
- Dennis, R. J. and Daniels, S.** (1981) "'Community" and the Social Geography of Victorian Cities' in *Urban History Yearbook 1981*; Leicester, Leicester University Press, pp. 7-23.
- Desai, R.** (1963) *Indian Immigrants in Britain*; Oxford, Oxford UP.
- Dewey, R.** (1957) 'The Neighbourhood, Urban Ecology and City Planners' in *Cities and Society*; Eds. Hatt, P. K. and Reiss, A. J. J. New York, The Free Press, pp. 783-790.
- Dickinson, G.** (Ed.) (1989) *Reproductions of Old Ordnance Survey Maps, North-West Leeds, 1908, scale 25"*; Ordnance Survey Sheet no. 218.01, Gateshead, Alan Godfrey Maps.
- Dickinson, G.** (Ed.) (1989) *Reproductions of Old Ordnance Survey Maps, South Leeds, 1906, scale 25"*; Ordnance Survey Sheet no. 218.06, Gateshead, Alan Godfrey Maps.
- Dickinson, G.** (Ed.) (1992) *Reproductions of Old Ordnance Survey Maps, Leeds, Harehills, Buslingthorpe & Chapeltown Road, 1906, scale 25"*; Ordnance Survey Sheet no. 203.14, Gateshead, Alan Godfrey Maps.
- Dickinson, G.** (Ed.) (1992) *Reproductions of Old Ordnance Survey Maps, Leeds: Headingley, 1906, scale 25"*; Ordnance Survey Sheet no. 203.13, Gateshead, Alan Godfrey Maps.
- Dickinson, G.** (Ed.) (1994) *Reproductions of Old Ordnance Survey Maps, Central Leeds, 1908, scale 25"*; Ordnance Survey Sheet no. 218.02, Gateshead, Alan Godfrey Maps.
- Dickinson, G.** (Ed.) (1995) *Reproductions of Old Ordnance Survey Maps, Leeds: Holbeck & New Wortley,*

1906, scale 25"; Ordnance Survey Sheet no. 218.05, Gateshead, Alan Godfrey Maps.

- Dillon, T.** (1973) 'The Irish in Leeds 1851-1861' *Thoresby Society Publications*; 54 (part 1, no. 119) : pp. 1-28.
- Drake, M. and Finnegan, R.,** (Eds.) (1994) *Sources and Methods: a handbook - Studying Family and Community History: 19th and 20th Centuries*, Vol. 4; Cambridge, Cambridge University Press in assoc. Open University.
- Drake, M.,** (Ed.) (1994) *Time, Family and Community: perspectives on family and community history - Studying Family and Community History: 19th and 20th Centuries*, (course reader); Oxford, Blackwell in assoc. Open University.
- Drummond, J. C. and Wilbraham, A.** (1991) *The Englishman's Food: a history of five centuries of English diet*; London, Pimlico.
- Duncan, S. S.** (1977) *Housing Disadvantage and Residential Mobility: immigrants and institutions in a northern town.*; Department of Urban and Regional Studies Working Paper; University of Sussex.
- Durkheim, E.** (1893) *The Division of Labour in Society (English edition, 1964)*; New York, Macmillan Publishing Company.
- Durkheim, E.** (1915) *The Elementary Forms of the Religious Life*; London, George Allen and Unwin.
- Dutch, R. A.,** (Ed.) (1977) *Roget's Thesaurus of English Words and Phrases*; Middlesex, England, Penguin.
- Eade, J.** (1997a) 'Identity, Nation and Religion: educated young Bangladeshi Muslims in London's East End' in *Living the Global City: globalisation as local process*; Ed. Eade, J. London and New York, Routledge, pp. 146-162.
- Eade, J.,** (Ed.) (1997b) *Living the Global City: globalisation as local process*; London and New York, Routledge.
- Englander, D.** (1994) *A Documentary History of Jewish Immigrants in Britain 1840-1920*; Leicester, Leicester University Press.
- Eyles, J.** (1990) 'Group Identity and Urban Space: the North American experience' in *Shared Space, Divided Space: essays on conflict and territorial organisation*; Eds. Smith, D. M. and Chisholm, M. London, Unwin Hyman, pp. 266.
- Falah, G.** (1996) 'Living Together Apart - Residential Segregation in Cities in Israel' *Urban Studies*; 33 (6) : pp. 823-857.
- Fennell, G.** (1997) 'Local Lives - Distant Ties: researching community under globalised conditions' in *Living the Global City: globalisation as local process*; Ed. Eade, J. London and New York, Routledge, pp. 90-109.
- Fishman, W. J.** (1974) *Jewish Radicals: from Czarist Stetl to London Ghetto*; New York, Pantheon Books.
- Fishman, W. J.** (1975) *East End Jewish Radicals, 1875-1914*; London, Duckworth in assoc. Acton Society Trust - paperback edition, 1995.
- Fishman, W. J.** (1988) *East End 1888: a year in a London borough among the labouring poor*, London, Gerald Duckworth & Co. Ltd.
- Fortes, M.** (1959) *The Web of Kinship among the Tallensi*; Oxford, Oxford UP.
- Fortes, M.** (1972) 'Primitive Kinship (reprint of article originally written in June 1959)' in *Biology and Culture*

- in Modern Perspective*; Scientific American, pp. 283-292.
- Fowler, H. W. and Fowler, F. G.**, (Eds.) (1975) *The Concise Oxford Dictionary of Current English*; Oxford, Clarendon Press.
- Frampton, K.** (1978) 'The Generic Street as a Continuous Built Form' in *On Streets*; Ed. Anderson, S. Cambridge, Massachusetts, MIT Press, pp. 308-336.
- Frampton, K.** (1980) *Modern Architecture, a Critical History*; London, Thames and Hudson.
- Freedman, M.** (1992) *Leeds Jewry: The First Hundred Years*; Leeds, Murray Freedman/The Jewish Historical Society of England, Leeds.
- Freedman, M.** (1994) *1891 Census Leeds: List of Jewish Residents (extracted and computed by Murray Freedman)*; Leeds, Murray Freedman.¹
- Freedman, M.** (1994) *Census List of Leeds Jewish Residents: 1841 (extracted and computed)*, Leeds, (Unpublished Computerised Data-Set), Lotus 123.
- Freedman, M.** (1994) *Census List of Leeds Jewish Residents: 1851 (extracted and computed)*, Leeds, (Unpublished Computerised Data-Set), Lotus 123.
- Freedman, M.** (1994) *Census List of Leeds Jewish Residents: 1861 (extracted and computed)*, Leeds, (Unpublished Computerised Data-Set), Lotus 123.
- Freedman, M.** (1994) *Census List of Leeds Jewish Residents: 1871 (extracted and computed)*, Leeds, (Unpublished Computerised Data-Set), Lotus 123.
- Freedman, M.** (1994) *Census List of Leeds Jewish Residents: 1881 (extracted and computed)*, Leeds, (Unpublished Computerised Data-Set), Lotus 123.
- Freedman, M.** (1994) *Census List of Leeds Jewish Residents: 1891 (extracted and computed)*, Leeds, (Unpublished Computerised Data-Set), Lotus 123.
- Freedman, M.** (1995) *Leeds Jewry: a history of its synagogues*; Leeds, Murray Freedman.
- Gans, H.** (1966) 'Planning and Social Life: friendship and neighbour relations in suburban communities' *Journal of the American Institute of Planners*; 27 : pp. 134-140.
- Genealogical Society of Utah**, Federation of Family History Societies, *1881 Census for Great Britain* [computer file], Colchester, Essex: The Data Archive [distributor], 29 July 1997. SN: 3643.
- Giddens, A.** (1971) *Capitalism and Modern Social Theory: an analysis of the writings of Marx Durkheim and Max Weber*; Cambridge, CUP.
- Giddens, A.** (1981) *A Contemporary Critique of Historical Materialism: Power, Property and State*; Contemporary Social Theory; London and Basingstoke, Macmillan Press.
- Giddens, A.** (1984) *The Constitution of Society: outline of the theory of structuration*; Cambridge, Polity Press.
- Glasman, J.** (1982) *London Synagogues and the Jewish Community, c. 1870-1900*, unpublished MSc. Thesis, Bartlett School of Architecture, University College London.
- GLC** (1978) *An Introduction to Housing Layout*, London, Architectural Press.
- Godley, A.** (1997) 'Leaving the East End: regional mobility among East European Jews in London, 1880-

¹All Freedman census data-sets are by special permission of the author.

- 1914' in *London: The Promised Land? The Migrant Experience in a Capital City (proceedings of the Launch Conference for The Centre for the Study of Migration, 5/11/95)*; Ed. Kershen, A. Aldershot, Hampshire, Ashgate Publishing, Ltd., pp. 50-65.
- Golby, J.**, (Ed.) (1994) *Communities and Families - Studying Family and Community History: 19th and 20th Centuries*, Vol. 3; Cambridge, Cambridge University Press in assoc. Open University.
- Hacking, I.** (1983) *Representing and Intervening*; Cambridge, Cambridge UP.
- Hannerz, U.** (1980) *Exploring the City: towards an urban anthropology*; New York, Columbia University Press.
- Hanson, J.** (1989) *Order and Structure in Urban Space: a morphological history of the City of London*, PhD Thesis, Bartlett School of Architecture and Planning, University College London.
- Harvey, D.** (1973) *Social Justice and the City*; London, Edward Arnold.
- Her Majesty's Government** (1883) *Census of England and Wales: ages, condition as to marriage and birthplaces of the people*; London, Eyre and Spottiswoode.
- Herbert, D. T. and Johnston, R. J** (1978), (Eds.) *Social Areas in Cities: processes, patterns and problems*; London, Wiley.
- Hersch, L.** (1969) 'International Migration of the Jews' in *International Migrations*; Ed. Willcox, W. F. London, Gordon and Breach (reprint of 1931 edition), pp. 471-520.
- Hertzberg, A.** (1968) *The French Enlightenment and the Jews*; New York, Columbia University Press.
- Higgs, E.** (1992) 'The 1891 Census: continuity and change' *The Local Historian*; 22 (4 November 1992): pp. 184-190.
- Higgs, E.** (1996) *A Clearer Sense of the Census: the Victorian censuses and historical research*; Public Record Office Handbooks; London, HMSO.
- Hillier, B et al** (1993) 'Natural Movement' *Environment & Planning B: Planning and Design*; pp. 29-66.
- Hillier, B.** (1987) 'Against Enclosure' in *Rehumanizing Housing*; Eds. Teymur, N., Markus, T., et al. London, Butterworth, pp. 63-88.
- Hillier, B.** (1996) *Space is the Machine: a configurational theory of architecture*; Cambridge, Cambridge University Press.
- Hillier, B. and Hanson, J.** (1987) 'The Architecture of Community: some new proposals on the social consequences of architectural and planning decisions' *Arch & comport./Arch. Behave.*; 3 (3) : pp. 251-273.
- Hillier, B. and Hanson, J.** (1990) *The Social Logic of Space*; Cambridge, Cambridge University Press.
- Hillier, B. and Penn, A.** (1991) 'Visible Colleges: structure and randomness in the place of discovery' *Science in Context*; 4 (1) : pp. 23-49.
- Hoexter, J. and Jung, M.**, (Eds.) (1938) *Source Book of Jewish History and Literature*; London, Shapiro, Vallentine & Co.
- Honeyford, R.** (1997) *Race Relations Must Avoid Ghettos*, 27/1/97, The Daily Telegraph, letter to the editor.
- Hughes, E. C.**, (Ed.) (1950) *Race and Culture - The collected writings of Robert E. Park*, Vol. 1; Glencoe, IL, Free Press.
- Hughes, E. C.**, (Ed.) (1952) *Human Communities: the City and Human Ecology - The collected writings of*

- Robert E. Park, Vol. 2; Glencoe, IL, Free Press.
- Hymason, A. M.** (1951) *The Sephardim of England: a history of the Spanish and Portuguese Jewish community, 1492-1951*; London, Methuen.
- Isaacs, R.** (1945) 'The Neighbourhood Theory, An Analysis of its Adequacy' *Journal of the American Institute of Planners*; 14 : pp. 15-23.
- Jackson, P. A. and Smith, S. J.**, (Eds.) (1981) *Social Interaction and Ethnic Segregation* - Institute of British Geographers Special Publications, Vol. 12; London, Academic Press.
- Jacobs, J.** (1961) *The Death and Life of Great American Cities*; Harmondsworth, Middlesex, Penguin.
- Jephcott, P. and Robinson, H.**, (Eds.) (1971) *Homes in High Flats: some of the human problems involved in multi-storey housing* - University of Glasgow Social and Economic Studies. Occasional papers; no. 13, Edinburgh, Oliver & Boyd.
- Jones, G. S.** (1971) *Outcast London: a study in the relationship between classes in Victorian society*, Oxford, Clarendon Press.
- Jones, H. R. and Davenport, M.** (1972) 'The Pakistani Community in Dundee: a study of its growth and demographic structure.' *Scottish Geographical Magazine*; 88 : pp. 74-85.
- Jones, P. N.** (1970) 'Some Aspects of the Changing Distribution of Coloured Immigrants in Birmingham, 1961-77' *Transactions, Institute of British Geographers*; 50 : pp. 199-219.
- Josephs, Z.** (1980) *Birmingham Jewry 1749-1914*; Birmingham, The Birmingham Jewish History Group.
- Josephs, Z.**, (Ed.) (1984) *Birmingham Jewry - vol.2: more aspects 1749-1930*; Birmingham, Birmingham Jewish History Research Group.
- Kalman, R.** (1980). *The Jewish East End - where was it?*; Ed. Newman, A. 'The Jewish East-End 1840-1939': proceedings of the conference held on 22 October 1980 jointly by the Jewish Historical Society of England and the Jewish East End Project of the Association for Jewish Youth, London, The Jewish Historical Society of England.
- Kaplan, H.** (1997) 'Ten Years of the Scottish Jewish Archives Centre' *10th Anniversary Magazine of the Scottish Jewish Archives Centre: Patterns and Images of Jewish Immigration in Scotland*; pp. 5-8.
- Katz, J.** (1978) *Out of the Ghetto - The Social Background of Jewish Emancipation 1770-1870*; New York, Schocken Books.
- Kershen, A.** (1995) *Uniting the Tailors: Trade Unionism Amongst the Tailors of London and Leeds, 1870-1939*; Ilford, Essex, Frank Cass & Co.
- Kershen, A.**, (Ed.) (1997) *London: The Promised Land? The Migrant Experience in a Capital City (proceedings of the Launch Conference for The Centre for the Study of Migration, 5/11/95)*; Aldershot, Hampshire, Ashgate Publishing, Ltd.
- Kosmin, B.** (1975). *Some Statistical Techniques and Sources for Research into the Social History of Anglo-Jewry.*; Ed. Newman, A. Provincial Jewry in Victorian Britain; conference held at University College London, July 6, 1975, London, Jewish Historical Society.
- Krausz, E.** (1964) *Leeds Jewry: Its History and Social Structure*; Cambridge, W. Heffer & Sons for the Jewish Historical Society of England.

- Krier, L.** (1978) 'The Reconstruction of the City' in *The Reconstruction of the European City*; London, AA Monographs: Rational Architecture, pp. 38-42.
- Krier, R.** (1984) *Urban Space (from the German, 1975)*; London, Academy Editions.
- Krüger, M. J. T.** (1979) 'An Approach to Built-Form Connectivity' *Environment & Planning B: Planning and Design*; 6 (1): pp. 67-88.
- Langer, S. K.** (1953) 'Virtual Space & the Modes of Virtual Space' in *Feeling and Form: a theory of art*; New York, Scribner, pp. 95-103.
- Lawton, R. and Pooley, C. G.** (1976) *The Social Geography of Merseyside in the Nineteenth Century (final report to the SSRC)*; SSRC.
- Lawton, R.,** (Ed.) (1978) *The Census and Social Structure: an interpretative guide to nineteenth century censuses for England and Wales*; London, Frank Cass.
- Lee, P. et al** (1995) *Area Measures of Deprivation: a study of current methods and best practices in the identification of poor areas in Great Britain*; Birmingham, The University of Birmingham Centre for Urban and Regional Studies.
- Lee, R. B.** (1976) '!Kung Spatial Organisation: An Ecological and Historical Perspective' in *Kalahari Hunter-Gatherers: studies of the !Kung San and their neighbours*; Eds. Lee, R. B. and DeVore, I. Cambridge, Massachusetts and London, England, Harvard UP, pp. 73-97.
- Lees, L. H.** (1969) 'Patterns of Lower-Class Life: Irish slum communities in nineteenth-century London' in *Nineteenth Century Cities: essays in the New Urban History*; Eds. Thernstrom, S. and Sennett, R. New Haven, Yale UP, pp. 359-85.
- Lees, L. H.** (1979) *Exiles of Erin: Irish migrants in Victorian London*; Manchester, Manchester UP.
- Lefebvre, H.** (1991) *The Production of Space (originally in French, 1974 as 'Production de l'espace')*; Oxford, Basil Blackwell.
- Lévi-Strauss, C.** (1953) 'Social Structure' in *Structural Anthropology, 1972*; Harmondsworth, Middlesex, Penguin University Books, pp. 282-5.
- Lévi-Strauss, C.** (1962) *The Savage Mind (English Edition, 1962)*; London, Weidenfeld and Nicholson.
- Levitas, S.** (1978) 'Anthropology and the Sociology of the Streets' in *On Streets*; Ed. Anderson, S. Cambridge, Massachusetts, MIT Press, pp. 225-240.
- Lewis, G. J.** (1982) *Human Migration: a geographical perspective*; Croom Helm Series in Geography and Environment; London, Croom Helm.
- Ley, D.** (1980) *Geography Without Man: a humanistic critique*; Research Paper No. 24; Oxford, School of Geography.
- Lipman, V. D.** (1962-67) 'The Rise of Jewish Suburbia' *Transactions of the Jewish Historical Society*; xxi : pp. 78-103.
- Lipman, V. D.** (1980). *Jewish Settlement in the East End*; Ed. Newman, A. 'The Jewish East-End 1840-1939': conference proceedings (for full details see Kalman, 1980 above).
- Lipman, V. D.** (1990) *A History of the Jews in Britain Since 1858*; Leicester, Leicester University Press.
- Lowenthal, M.** (1936) *The Jews of Germany. A Story of Sixteen Centuries*; Philadelphia, Jewish Publication

Society of America.

Lynch, K. (1960) *The Image of the City*; Cambridge, Massachusetts, MIT Press.

Makepeace, C. (Ed.) (1991) *Reproductions of Old Ordnance Survey Maps: Manchester (South-East), 1915, scale 25"*; Ordnance Survey Sheet no. 104.11, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1994) *Reproductions of Old Ordnance Survey Maps : Manchester (Victoria Park) scale 25"*, 1889; Ordnance Survey Sheet no. 104.15, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1994) *Reproductions of Old Ordnance Survey Maps: Manchester (Fallowfield), 1904, scale 25"*; Ordnance Survey Sheet no. 111.03, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1994) *Reproductions of Old Ordnance Survey Maps: Manchester (Gorton & Belle Vue), 1905, scale 25"*; Ordnance Survey Sheet no. 104.16, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1994) *Reproductions of Old Ordnance Survey Maps: Manchester (Old Trafford) scale 25, 1905"*; Ordnance Survey Sheet no. 104.13, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1994) *Reproductions of Old Ordnance Survey Maps: Manchester (Openshaw), 1905, scale 25"*; Ordnance Survey Sheet no. 104.12, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1994) *Reproductions of Old Ordnance Survey Maps: Manchester (Salford Docks) scale 25"*, 1905; Ordnance Survey Sheet no. 104.09, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1994) *Reproductions of Old Ordnance Survey Maps: Manchester (Whalley Range) scale 25"*, 1905; Ordnance Survey Sheet no. 111.02, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1995) *Large Scale Ordnance Survey Maps: Manchester (Piccadilly), 1849; scale 1 yard = 1 mile*; Ordnance Survey Sheet no. 29, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1995) *Reproductions of Old Ordnance Survey Maps: Manchester (South-West), 1894; scale 25"*; Ordnance Survey Sheet no. 104.10, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1996) *Large Scale Ordnance Survey Maps: Manchester (New Cross), 1849; scale 1 yard = 1 mile*; Ordnance Survey Sheet no. 24, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1996) *Reproductions of Old Ordnance Survey Maps: Manchester (Moss Side), 1894; scale 25"*; Ordnance Survey Sheet no. 104.14, Gateshead, Alan Godfrey Maps.

Makepeace, C. (Ed.) (1996) *Reproductions of Old Ordnance Survey Maps: Manchester (North-East) 1891; scale 25"*; Ordnance Survey Sheet no. 104.07, Gateshead, Alan Godfrey Maps.

March, L. (1975) 'Elementary Models of Built Forms' in *Urban Space and Structures*; Eds. Martin, L. and March, L. Cambridge, Cambridge UP, pp. 55-96.

Markus, T. A. (1993) *Buildings and Power: Freedom and Control in the Origin of Modern Building Types*; London and New York, Routledge.

Martin, L. (1975a) 'The Grid as Generator' in *Urban Space and Structures*; Eds. Martin, L. and March, L. Cambridge, Cambridge UP, pp. 6-27.

Martindale, D. and Neuwirth, G. (1958) 'Prefatory Remarks: The Theory of the City' in *The City*; Weber, M. New York, The Free Press, pp. 9-62.

Massey, D. and Denton, N. A. (1987) 'The Dimensions of Residential Segregation' *Social Forces*; 67 : pp. 281-315.

- Matthews, R.** (1998) *Facts versus Factions: the use and abuse of subjectivity in scientific research*; Cambridge, The European Science and Environment Forum.
- Mayne, A.** (1993) *The Imagined Slum: newspaper representation in three cities 1870-1914*; Leicester, Leicester UP.
- Mead, M.** (1972) 'Neighbourhoods and Human Needs' in *Human Identity in the Urban Environment*; Eds. Bell, G. and Tyrwhitt, J. Harmondsworth, Penguin (A Pelican Original), pp. 245-251.
- Meller, H.** (1985) *London Cemeteries: an illustrated guide and gazetteer*, Surrey, England, Gregg International.
- Michelson, W. H.** (1970) *Man and His Urban Environment: a sociological approach*; Reading, Massachusetts, Addison-Wesley Publishing Company.
- Mills, D.** (1994) 'Community and Nation in the Past: perception and reality' in *Time, Family and Community: perspectives on family and community history*; Ed. Drake, M. Oxford, Blackwell in assoc. Open University, pp. 261-285.
- Mills, D. R. and Mills, J.** (1989) 'Occupation and Social Stratification Revisited: the census enumerators' books of Victorian Britain' *Urban History Yearbook 1989*; pp. 63-77.
- Mills, D. R. and Pearce, C.** (1989) *People and Places in the Victorian Census: a review and bibliography of publications based substantially on the manuscript census enumerators' books 1841-1911*; Historical Geography Research Series; Cheltenham, Dept. of Geography, College of St. Paul & St. Mary, Cheltenham, Glos. GL50 24H.
- Milner, G.,** (Ed.) (1975) *Selections from 'Odds and Ends', a Manuscript Magazine issued by St Paul's Library and Educational Society - Vol. 2*; Manchester.
- Miron, D.** (1996) 'Depictions in Modern Hebrew Literature' in *City of the Great King: Jerusalem from David to the Present*; Ed. Rosovsky, N. Cambridge, Mass, Cambridge University Press, pp. 241-287.
- Mumford, L.** (1966) 'In Defence of the Neighbourhood (originally published in *Town Planning Review* in January 1954)' in *Urban Housing*; Eds. Wheaton, W. L. C. and Milgram, G. New York, The Free Press, pp. 114-125.
- Neuwirth, G.** (1969) 'A Weberian Outline of a Theory of Community: its application to the 'Dark Ghetto'' *British Journal of Sociology*; 20 : pp. 148-163.
- Newman, A.** (1985) *Jewish East London: The Russell and Lewis Map (publisher's note on reproduction of map from 'The Jew in London')*; London, The London Museum of Jewish Life.
- Newman, O.** (1972) *Defensible Space*; London, Architectural Press.
- Norburg-Schultz, C.** (1984) *Genius Loci: towards a phenomenology of architecture*; New York, Rizzoli.
- ©**PCS** (1995) *Summary of Report on ESRC Review of OPCS (Office of Population Censuses and Surveys) Social Classifications*; <http://www.irc.essex.ac.uk>, ESRC Research Centre on Micro-Social Change - British Household Panel Study.
- Ordnance Survey** (Ed.) (1852) *6" to the mile: surveyed in 1847 (first edition)*; Ordnance Survey Map Sheet no. 203, Copy from Royal Geographical Society, London.
- Ordnance Survey** (Ed.) (1852) *6" to the mile: surveyed in 1847 (first edition)*; Ordnance Survey Map Sheet

- no. 218, 203, Copy from Royal Geographical Society, London.
- Ordnance Survey** (Ed.) (1893) *scale 25"; surveyed in 1888-9 (first edition)*; Ordnance Survey Map Sheet no. 104.02, Copy from Manchester City Library, Manchester.
- Ordnance Survey** (Ed.) (1893) *scale 25"; surveyed in 1888-9 (first edition)*; Ordnance Survey Map Sheet no. 104.03, Copy from Manchester City Library, Manchester.
- Ordnance Survey** (Ed.) (1893) *scale 25"; surveyed in 1888-9 (first edition)*; Ordnance Survey Map Sheet no. 104.06, Copy from Manchester City Library, Manchester.
- Page, S. J.** (1991) 'The Mobility of the Poor: a case study of Edwardian Leicester' *The Local Historian*; 21 (3) : pp. 109-119.
- Park, R.** (1926) 'The Urban community as a Spatial Pattern and a Moral Order' in *The Urban Community*; Ed. Burgess, E. W. Chicago, University of Chicago Press.
- Park, R., Burgess, E. and McKenzie, R.** (1925) *The City*, Chicago, University of Chicago Press.
- Peach, C.** (1968) *West Indian Migration to Britain*; London, Oxford University Press.
- Peach, C.** (1975) (Ed.) *Urban Social Segregation*; London, Longman.
- Peach, C.** (1979) 'British Unemployment Cycles and West Indian Immigration' *New Community*; 7 : pp. 40-44.
- Peach, C.** (1981) 'Conflicting Interpretations of Segregation' in *Social Interaction and Ethnic Segregation*; Eds. Jackson, P. and Smith, S. J. London, Academic Press, pp. 19-33.
- Peponis, J.** (1989) 'Space, Culture and Urban Design in Late Modernism and After' *Ekistics*; 334-335 : pp. 93-107.
- Perlman, J. E.** (1976) 'The Myth of Marginality: urban poverty and politics in Rio de Janeiro' in Berkeley, University of California Press.
- Perry, C.** (1966) 'The Neighbourhood Unit Formula (originally published 1939)' in *Urban Housing*; Eds. Wheaton, W. and Milgram, G. New York, The Free Press, pp. 94-109.
- Pollins, H.** (1980). *East End Working Men's Clubs; affiliated to the Working Men's Clubs and Institute Union, 1870-1914*; 'The Jewish East-End 1840-1939': (for full details see Kalman, 1980 above).
- Pollins, H.** (1982) *An Economic History of the Jews in England*; Littman Library of Jewish Civilisation; London, Associated University Presses.
- Pollins, H.** (1989) 'Immigrants and Minorities - The Outsiders in Business' *Immigrants & Minorities*; 8 (3): pp. 252-270.
- Pooley, C.** (1977) 'The Residential Segregation of Migrant communities in Mid Victorian Liverpool' *Transactions, Institute of British Geographers*; 2 (new series): pp. 364-382.
- Pooley, C.** (1978) 'Residential Mobility in the Victorian City'; *Transactions, Institute of British Geographers*; 3 (new series): pp. 258-277.
- Pooley, C. and Whyte, I.** (Eds.) (1991) *Migrants, Emigrants and Immigrants: a social history of migration*; London and New York, Routledge.
- Potter, B.** (1889) 'The Jewish Community' in *Life and Labour of the People in London*; Ed. Booth, C. London, Macmillan, pp. 169-172.

- Pryce, W. T. R.**, (Ed.) (1994) *From Family History to Community History - Studying Family and Community History: 19th and 20th Centuries*, Vol. 2; Cambridge, Cambridge University Press in assoc. Open University.
- Rau, D.** (1993) *1891 Census Project, Spitalfields (Computer File)*, Colchester, ESRC Data Archive.
- Rau, D.**, (Ed.) (1994) *1891 Census - Index of Heads of Family - Occasional Publication*, Vol. 5; Leicester, University of Leicester Department of History and the Jewish Historical Society of England.
- Ravid, B. C.** (1992) 'From Geographical Realia to Historiographical Symbol: the odyssey of the word *ghetto*' in *Essential Papers on Jewish Culture in Renaissance and Baroque Italy*; Ed. Ruderman, D. B. New York and London, New York University Press, pp. 373-385.
- Robinson, V.** (1981) 'Segregation and Simulation: a re-evaluation and case study' in *Social Interaction and Ethnic Segregation*; Eds. Jackson, P. and Smith, S. J. London, Academic Press, pp. 137-161.
- Robinson, V.** (1984) 'Asians in Britain: a study in encapsulation and marginality' in *Geography & Ethnic Pluralism*; Eds. Clarke, C., Ley, D., et al. London, Allen & Unwin, pp. 231-257.
- Roden, C.** (1997) *The Book of Jewish Food: an odyssey from Samarkand and Vilna to the present day*, Middx, Viking.
- Rossi, A.** (1989) *The Architecture of the City*; Opposition Books; Cambridge, Massachusetts, MIT Press.
- Roth, C.** (1967) *A Short History of the Jewish People*; New York, East and West Library.
- Rozenblit, M.** (1983) *The Jews of Vienna, 1867-1914: assimilation and identity*; SUNY Series in Modern Jewish History; Albany, New York, State University of New York Press.
- Ruderman, D. B.** (1997) *The Cultural Significance of the Ghetto in Jewish History*, 5th March, 1997, Unpublished Lecture at the Institute of Jewish Studies, University College London, Lecture.
- Russell, C. and Lewis, H. S.** (1900) *The Jew in London*; [with a map specially made for this volume by Geo. E. Arkell](#); London, Fisher Unwin.
- Sack, R. D.** (1980) 'The Societal Conception of Space' in *Conceptions of Space in Social Thought*; London and Basingstoke, Macmillan Press Ltd., pp. 167-196.
- Sassen, S.** (1991) *The Global City*; Princeton, Princeton University Press.
- Schama, S.** (1995) *Landscape and Memory*; London, Harper Collins.
- Schofield, R. S. and Wrigley, E. A.**, (Eds.) (1986) *Population and History from the Traditional to the Modern World - Studies in Interdisciplinary History*, Vol. 4; Cambridge, Cambridge UP.
- Schumacher, T.** (1978) 'Buildings and Streets' in *On Streets*; Ed. Anderson, S. Cambridge, Massachusetts, MIT Press.
- Schürer, K.** (1991) 'The 1891 Census and Local Population Studies' *Local Population Studies*; Autumn (47).
- Schürer, K. and Arkell, T.** (1992) *Surveying the People: the interpretation and use of documentation sources for the study of population in the later seventeenth century*; Oxford, Leopard's Head Press (Local Population Studies Supplement).
- Segre, D. V.** (1987) *Memoirs of a Fortunate Jew*; London, Peter Halban Ltd. (Originally in Italian, published by Gruppo Editoriale Fabbri, Bompiani).
- Sennett, R.** (1971) 'Middle class families and urban violence: the experience of a Chicago community in the

- 19th century' in *Anonymous Americans*; Ed. Haravan, T. K. Englewood Cliffs, New Jersey, Prentice Hall, pp. 280-305.
- Sennett, R.** (1994) 'Fear of Touching' in *Flesh and Stone - the body and the City in Western Civilisation*; New York, W.W. Norton and Company, pp. 212-251.
- Shaw, M.** (1979) 'Reconciling Social and Physical Space' *Transactions, Institute of British Geographers*; 4 (New Series) : pp. 192-213.
- Shilhav, Y. and Friedman, M.** (1985) *Growth and Segregation - the Ultra Orthodox Community of Jerusalem.*; Jerusalem, Jerusalem Institute for Israel Studies (in Hebrew).
- Sibley, D.** (1992) 'Outsiders in Society and Space' in *Inventing Places: studies in cultural geography*; Eds. Anderson, K. and Gale, F. New York, Wiley, pp. 107-122.
- Simmons, I.** (1981) 'Contrasts in Asian Residential Segregation' in *Social Interaction and Ethnic Segregation*; Eds. Jackson, P. and Smith, S. J. London, Academic Press, pp. 81-100.
- Smith, D. M.** (1990) 'Introduction: the sharing and dividing of geographical space' in *Shared Space, Divided Space: essays on conflict and territorial organisation*; Eds. Smith, D. M. and Chisholm, M. London, Unwin Hyman, pp. 266.
- Smith, S.** (1989) 'The Politics of Race and a New Segregationism' in *The Political Geography of Contemporary Britain*; Ed. Mohan, J. Basingstoke, Macmillan, pp. 151-171.
- Tananbaum, S. L.** (1993) 'Making Good Little English Children: infant welfare and anglicisation among Jewish immigrants in London, 1880-1939' *Immigrants & Minorities*; 12 (2) : pp. 176-199.
- The Commission on Race and Housing** (1966) 'Where Shall We Live?' in *Urban Housing*; Eds. Wheaton, W. L. C. and Milgram, G. New York, The Free Press, pp. 269-286.
- Tomlinson, W.** (1887) *By-Ways of Manchester Life*; Manchester, Butterworth.
- Topalov, C.** (1993) 'The City as Terra Incognita: Charles Booth's Poverty Survey and the people of London, 1886-1891' *Planning Perspectives*; 8 : pp. 395-425.
- Turner, V.** (1969) *The Ritual Process*; New York, Cornell University Press.
- Vaughan, L.** (1997) 'The Urban 'Ghetto': the spatial distribution of ethnic minorities. Paper given at the First International Space Syntax Symposium, University College London, 16-18 April, 1997. To be published by the Space Syntax Laboratory in 1999.
- Venturi, R.** (1972) *Learning from Las Vegas*; Cambridge, Massachusetts, MIT Press.
- Ward, D.** (1975) 'Victorian Cities: how modern?' *Journal of Historical Geography*; 1 : pp. 135-51.
- Ward, D.** (1982) 'The Ethnic Ghetto in the United States: past and present' *Transactions of the Institute of British Geographers*; 7 (new series) : pp. 257-275.
- Waterman, S.** (1981) 'Changing Residential Patterns of the Dublin Jewish Community' *Irish Geography*; 14 : pp. 41-50.
- Waterman, S.** (1983) 'Neighbourhood, Community and Residential Change Decisions in the Dublin Jewish Community' *Irish Geography*; 16 : pp. 55-68.
- Waterman, S.** (1989) *Jews in an Outer London Borough, Barnet*; Queen Mary College, London.
- Waterman, S.** (1990) 'Involuntary Incorporation: the case of Israel' in *Shared Space, Divided Space: essays*

- on conflict and territorial organisation; Eds. Smith, D. M. and Chisholm, M. London, Unwin Hyman.
- Waterman, S. and Kosmin, B.** (1987) 'Ethnic Identity, Residential Concentration and Social Welfare: the Jews in London' in *Race and racism: essays in social geography*; Ed. Jackson, P. London, Allen & Unwin, pp. 254-275.
- Waterman, S. and Schmool, M.** (1995) 'Literary Perspectives on Jews in Britain' in *Writing Across Worlds: literature and migration*; Eds. King, R. and Connell, J. London, Routledge, pp. 180-197.
- Webber, M. M.** (1964) 'Urban Place and Non-place Urban Realm' in *Explorations into Urban Structure*; Philadelphia, University of Philadelphia, pp. 79-147.
- Weber, M.** (1914) *Economy and Society* (1968 edition); New York.
- Weber, M.** (1921) *The City* (translated from the German and edited by Don Martindale and Gertrud Neuwirth for the 1958 edition); New York, The Free Press.
- Webster, N. and Teall, A. M.,** (Eds.) (1965) *Webster's Dictionary*; New York, Award Books.
- Werbner, P.** (1994) 'Avoiding the Ghetto: Pakistani Migrants and Settlement Shifts in Manchester' in *Time, Family and Community: perspectives on family and community history (originally printed in New Community, 1979, vol. 7, pp. 376-389)*; Ed. Drake, M. Oxford, Blackwell in assoc. Open University, pp. 240-260.
- White, P. E. and Woods, R. I.,** (Eds.) (1980) *The Geographical Impact of Migration*; London, Longman.
- Whyte, W. F.** (1943) *Street Corner Society*; Chicago, University of Chicago.
- Williams, B.** (1985a) *The Making of Manchester Jewry 1740-1875*; Manchester, Manchester UP.
- Williams, B.** (1985b) 'The Anti-Semitism of Tolerance: Middle-Class Manchester and the Jews 1870-1900' in *City, Class and Culture*; Eds. Kidd, A. and Roberts, K. Manchester, Manchester UP.
- Williams, B.** (1992) *Lists of Jewish Residents from the 1881 census of Manchester*; Manchester, Manchester Jewish Museum. Unpublished: by special permission of the author.
- Wilson, D.** (1994) *Rothschild: a story of wealth and power*, London, Mandarin Paperbacks.
- Wirth, L.** (1928) *The Ghetto*; Chicago and London, University of Chicago Press (1969 edition).
- Wirth, L.** (1933) 'The Scope and Problems of the Community' [originally published in Publications of the Sociological Society of America, XXVII (May, 1933), 61-73.] in *On Cities and Social Life: selected papers*; Ed. Albert J. Reiss, J. Chicago and London, University of Chicago Press, pp. 165-177, 1964.
- Wirth, L.** (1938) 'Urbanism as a way of life' [originally published in the American Journal of Sociology, 44 (July, 1938), 1-24.] in *On Cities and Social Life: selected papers*; Ed. Albert J. Reiss, J. Chicago and London, University of Chicago Press, pp. 60-83, 1964.
- Wirth, L.** (1939) 'Social Interaction: the problem of the individual and the group' [originally published in the American Journal of Sociology, XLIV (May, 1939), 965-79.] in *On Cities and Social Life: selected papers*; Ed. Albert J. Reiss, J. Chicago and London, University of Chicago Press, pp. 3-17, 1964.
- Wirth, L.** (1945) 'Human Ecology' [originally published in American Journal of Sociology, L (May, 1945), 483-88.] in *On Cities and Social Life: selected papers*; Ed. Albert J. Reiss, J. Chicago and London, University of Chicago Press, pp. 178-188, 1964.
- Yiftachel, O.** (1995) 'Planning as Control: policy and resistance in a deeply divided society' *Progress in*

Planning; 44 (2).

Young, M. and Willmott, P. (1962) *Family and Kinship in East London*; Harmondsworth, Middlesex, Penguin (Pelican Books).

Zangwill, I. (1922) *Children of the Ghetto: a study of a peculiar people* (originally published in 1892); London, Heinemann.

APPENDIX A

Data Set Compilation Methods

1. Introduction

This appendix gives a detailed account of the method by which the original data provided by Freedman, Williams and the data collated directly from the census were compiled.

2. Description of the Manchester Statistical Tables

2.1 FOLDER: SPATIAL DATA

2.1.1 Manchester(table)all

This is the spatial table from the AxMan file, to which street names and districts were added (including a category for non-Jewish streets). A column was added with two categories: Jewish streets and non-Jewish streets.

2.1.2 Manchester(table)summary

This is based on *Manchester(table)all*. All non-Jewish streets were deleted. All other streets were copied, except for cases where streets had more than one axial line, where the mean spatial values per street were calculated; except line length, where the values were summed, not averaged. Line length was translated into metres by multiplying by 7.4142541 - based on the length of Carnarvon Street which is 1000 feet/304.5 metres long. The spatial columns were then added to, with the mean radius-radius values taken straight from the AxMan table of values (*Manchester(table)rad8*), as was the column of depth from the most globally integrated line and line length in pixels. In addition, a column was added to define whether each of the streets was located in the dense (Red Bank) area of Manchester.

The remainder of the table is summaries per street for Jewish and non-Jewish households, based on 'census1881Manchester'; 'census1881Prestwich'; 'census1881Salford'; 'census1881Chorlton'; 'census1881non-Jew'. The columns were created in pairs for Jewish and non-Jewish households, as follows: 'μJewHouseh', 'μHousehnon/Jew' which are the mean no. of Heads per household (this was only calculated for the Red Bank area); '%sharingJho.', '%sharingnon-Jho.' which are the percentage of households for each street which are sharing households; 'μservJew', 'μservnon/Jew' are mean no. of servants per household; 'μbo/lodgJew', 'μbo/lodgnon/Jew' are mean no. of boarders and lodgers per household; 'μserv-lodgJew', 'μserv-lodgnon/Jew' are the number of servants less the number of boarders and lodgers, averaged for all households in each street; 'μJewinhabit', 'μinhabitnon/Jew' are mean number of inhabitants per household; 'μageeldBritJew', 'μageeldBritnon/J' are mean age of eldest child born in Britain, only for households where Head or Wife were born abroad (this was only calculated for the Red Bank area); 'μsocialrankJew', 'μsocialranknon-Jew' are the mean social class number (where 5 is Class I Professional and 1 is Class V Unskilled, so the higher the rank, the higher the class value); 'ΣJewinhab', 'Σnon-Jewinhab' are the total number of inhabitants in each street (Jewish/non-Jewish); 'Σallinhab' is the sum of 'ΣJewinhab' + 'Σnon-Jewinhab'; 'Jew.DENSITYperΣinhab' is the proportion of Jews per street, based on the number of inhabitants (the formula was: "ΣJewinhab" / "Σallinhab" x 100); ΣJewhouseh', 'Σnon/Jewhouseh' are the total number of Jewish and non-Jewish households in each street, 'ΣsoleJhouseh' gives the number of

households defined as Jewish, but which only contain Jewish lodgers or boarders and the Head is non-Jewish. ' \sum allhouseholds' is the total number of households in each street (Jewish/non-Jewish); 'Jew.DENSITYper \sum househ' is the proportion of Jews per street, based on the number of households (the formula was: " \sum Jewhouseh" / " \sum allhouseholds" x 100).

After this set of columns is a set which summarises additional data gathered on Red Bank area streets only, as follows: '%J.H.unempl' is the percentage of Jewish Heads unemployed in each street; '%nonJ.Hunempl' is the same for non-Jewish households in each street; '%JBo.sameoccup' is the percentage of Jewish households in each street whose boarders or lodgers share the same occupation as the head; '%nonJ.Bo.sameoccup' is the same for non-Jewish households in each street; '%J.H.bornabroad' is the percentage of Jewish heads or wives born abroad; '%nonJ.H.bornabroad' is the same for non-Jewish heads or wives, per street; '%H/Wsamebirthp?' is the percentage of households per street in which the head and wife come from the same country of origin (only if born abroad); '%nonJ.H/Wsamebirthp?' is the same for non-Jewish households; '%Bo.samebirthp?' is the percentage of Jewish households in which the boarder or lodger shares the same country of origin as the head or wife (one was sufficient to define as sharing); '%nonJ.Bo.samebirthp?' is the same for non-Jewish households.

Two further columns were created, to take account of the 47 streets which contain households with Jews who are sole inhabitants - i.e. they are lodging in non-Jewish households. Of the 47 cases, 12 were streets where the only Jews were 'sole inhabitants'; 8 had 1 more Jewish household, 5 had 2 more Jewish household, 13 had between 3 and 10 more households and the remainder had over 10 other Jewish households. A column was created called ' \sum Jewh.w/outsole', which was the result of subtracting the total amount of sole Jewish households ' \sum soleJhouseh', from the total of all Jewish households ' \sum Jewhouseh'. This column then became the basis for calculating a Jewish density column, based on the formula: $\{(\sum \text{Jewh.w/outsole} / \sum \text{allhouseholds}) * 100\}$, called 'Jew.DENSITYper \sum h.w/outsole', latterly renamed as 'Jew.DENSITYper.household'. This column eliminates sole Jewish households from the calculation of density and in the 12 streets where sole Jewish households were the only Jewish households in the area, their density was redefined as 0, whereas in the original calculation of density, their Jewish density was found to be between 0.264 and 9.091.²

2.1.3 census1881AllManchPerCl.R-B

This file summarises the table *census1881AllManch* like the table above, but only includes households within Red-Bank. First selecting Jewish households in class I, copying its mean values, doing the same for Jewish class II and so on; and then doing the same for each group of non-Jewish households in each class.

2.1.4 μ spatial/district

This table summarises the global, local and R^2 values for intelligibility for each of the areas of the model. The values were calculated using AxMan PPC 2.5, which enables selection of groups of lines, calculation of the global/local scatter, which in turn shows the aforementioned values for the selection. (The means for global, local and any other spatial measure are shown only when the desired measure is selected as the y axis in the scatter).

2.1.5 Manchester(table)Per10%band

This table summarises the table called *Manchester(table)summary*, by sorting density without sole lodgers and defining it by 10 bands of density. The mean values for each band were then entered into this table and used for scattergrams between spatial and social values.

²An older version of this file, called 'Manchester(table)summaryOLD' includes further rows for work streets and streets for which context was not found - these were eliminated in the final file, since without context there was no point in including these streets in the calculations for density

2.2 FOLDER: ADDRESSLISTS

2.2.1 address1881ManLIST

This is a (382 rows) table of each street in which Jews were found to live in Manchester. Along with the address, it shows on which page of Williams original lists each instance of address was found. This was created before all addresses were verified on the map - some addresses are repeated more than once.

2.2.2 wrk.address1881ManLIST

This is a (172 rows) table of each street in which Jews were found to live in Manchester. Along with the address, it shows on which page each instance of address was found. This was created before all addresses were verified on the map - some addresses are repeated more than once.

2.2.3 wrk/homeadd81ManLIST

This is a (373 rows) table of each street in which Jews were found to live in Manchester as well as Jewish work addresses. This was modified after all addresses were verified on the map. It shows on which page each instance of address was found. It shows the address, page number and film number. It also shows the district, and the sheet number of the Ordnance Survey map on which the street appears. The axial line number of each street name is given, whether this is a home, work or both work or home address is also classified. The series in which the streets were originally sorted (and thus lent the number to the axial line coding) is also shown. Streets which appear in Bill Williams list of Jews from the 1881 census³ are given the list number from Williams' book.

2.2.4 census1881distancetowork

This is a (249 rows) table in which each row is an incidence where a work address was specified. (The reason it has more rows than *address1881ManLIST* is that several work addresses were specified more than once and some households had more than one work address). It shows on which page each instance of address was found. It shows the occupation and birthplace of the person associated with the work address. It shows the address, district and axial number and also shows the spatial values associated with each home address. The work address is then shown along with its axial line number. (In cases where more than one work address was given for a home address, both were assigned axial values.) Then the average depth from the home address to the work address is shown. (In cases where more than one work address was given for a home address, mean depth for both was calculated.)* The occupation as listed in the business directory⁴ is given and whether this is a home, work or both work or home address is also classified. Lastly a column shows whether work and home addresses are identical or not.

* this was done as follows: each case where work and home addresses were not identical was found in turn. Point depth from the work address was calculated in AxMan (if the work address was comprised of more than one axial line, all were selected). The mean depth of the home address was calculated where the home address was comprised of more than one axial line, otherwise, it was simply identified by clicking on the axial line of the home address. These values were also entered into a MiniCad file, in which each axial line could then be coloured up by mean depth. (If a home street was associated with more than one work address, the lower depth value was used for colouring up the CAD picture, although each case was entered separately in the table.)

2.2.5 census1881distancetohome

This is based on *census1881distancetowork* and was created in order to find out the average distance from work streets to home addresses. 'census1881distancetowork' has multiple work addresses and two columns of depth from work for the same household (where a head has more than one shop, for instance) so wherever two work addresses appeared at the same address, the row was copied twice, one for each different work address; the depth from work for the second address was then applied to the second of each pair of addresses. All cases where addresses had not been found were deleted (3.6% of all cases).

³ Williams (1985a).

⁴ See chapter on methodology in this thesis, in the section: Data on Jewish Settlement in Manchester, for explanation of directories.

2.2.6 μ distancehome

This table has averages per work address (according to axial number) from *census1881distancehome*. Work addresses which had not been found on the map were not included in this table.

2.3 FOLDER: ADDRESS DATA

2.3.1 address1881Manchester

This is a summary table of each Jewish household in the data-base (including sole Jews). First, the page number, film number and entry number are given.

Second, the summary information about the household is given: family name, whether Jewish, relation to head, whether sole Jew, number of heads in household; sharing heads? which shows if household has or hasn't more than one head, age and occupation. The occupation of the eldest boarder, lodger or other heads of household co-residing is also given and then a column determines whether this is identical to the main head of household. After this the birthplace of head and the birthplace of boarder, lodger or co-residing heads are given. These are also compared in a column which determines whether this is identical to the main head of household. Then a column determines whether the head is born abroad. Lastly, a column determines whether both occupation and birthplace are identical.

Third, the home address is given along with its spatial values. After this the district in which each street falls is given (both general district and sub-districts for Cheetham). (Note that in cases where more than one street address was given, both axial numbers are shown and the mean spatial values for the two are entered). The top ten number for occupations is also given (the numbers relate to the alphabetical order of the top ten). Then the work addresses, occupations and names given in business directories are given. After this comes a column which determines whether the work address is the same as the home address. Then the Armstrong social classes are given, after which social rank is determined by giving the top rank I = 5, rank II = 4, rank III = 3, rank IV = 2, rank V = 1 (in order that the higher the mean rank, the higher the social class). Then the work categories according to Armstrong and the Cambridge group are also given. Then the work addresses, directory occupations and directory names are given along with their spatial values. (The spatial values for each set of addresses was copied from *Manchester(table)summary*, as well as the axial line number.) The district in which each work address is given in a column called 'wrkdistrict', this is based on the work axial line number.

Fourth, a summary of the number of each category of person in the household is given - the number of heads, Wives, adult offspring, children, adult relatives, child relatives, Jewish servants, non-Jewish servants, Jewish boarders or lodgers, non-Jewish boarders or lodgers, other (such as pupil) and the sum of inhabitants is also given. After this there are the following columns created from those listed before: \sum servant, which is the sum of Jewish servants and non-Jewish servants; any? which shows if household has or hasn't any servants; \sum bo/lodg, which is the sum of Jewish boarders or lodgers and non-Jewish boarders or lodgers; \sum head, which is the number of heads (copied from before); serv-lodg, which \sum servant minus \sum bo/lodg; age eld.Brit, which is the age of the eldest child born in Britain in each household (cases where there were no children, or all were born abroad, where left blank).

2.3.2 wrk.address1881Manchester

This table is identical to address1881Manchester, except it summarises each household for which work address data were available.

2.3.3 occup.summarydata

This table summarises 'address1881Manchester' by averaging according to occupation category, only for the spatial data of work addresses: first by Cambridge occupation categories and then by Armstrong. Columns which could not be summarised (such as place names) were deleted.

2.3.4 socialclasssummaryJ/nonJ

This is a summary per social class, from *census1881Red-BankOnly*. % Heads with servants was taken from

a frequency distribution of the column in the *census1881Red-BankOnly* called 'any servants?'. 'Servants/house' is the mean of no. servant in the *census1881Red-BankOnly*. 'no. households' is the count, of each class in turn.

2.4 FOLDER: FULL CENSUS DATA

2.4.1 census1881Manchester

This is the original transcription of the Williams data on Jewish individuals in the 1881 census into electronic form. Full details of the method of transcription are given as follows:

- 1) Bill Williams' page numbers were entered. The entry sequence of each name was numbered up in a column called 'entry no.' Square bracketed entries, which were marked such as they were questionable Jews, were not entered. Where Jews were only lodgers or boarders, the non-Jewish residents were not entered. Where non-Jewish residents were located in Jewish households (defined by Jewish head), they were entered and coded as non-Jew. The latter cases were normally servants in Jewish households, but also included boarders and lodgers as well as several cases with multiple heads of household, where some were Jewish and others weren't.
- 2) Name, age, marital status and occupation were copied. If the occupation was 'scholar' and the person was under 18, this was not entered into the statistical table. If occupation mentioned that the person was an employer, employed or unemployed, this fact was entered in a column of occupation status. The column of occupation status was modelled on the 1891 census.
- 3) When residents of the household entered by Williams were thought to be non-Jewish (such as lodgers or servants) these were coded as 'non-Jewish' in a column created for this.
- 4) If Jews were the only non-gentile occupants of a household, this fact was entered into a column called 'sole Jew?', as 'yes'.
- 5) Address names and numbers were copied in full. If more than one head of household appeared at the same address, this fact was entered into a column called 'no. of heads' as two, three and so on.
- 6) The place of birth was copied and also coded as a category. Blank entries were coded as 'none given'.
- 7) The workplace address from the business directories, where given, was entered into columns called 'wrk. number' and 'wrk. address'. The occupation and name of head of household, if different in directory, was entered in 'directory occupation' and 'directory name', respectively. If the work address was identical to the home address, this was entered as 'yes' in the 'work = home?' column (in cases where no alternative address was given for the work address, it was assumed that the work and home addresses were identical).
- 8) In cases where Williams chose to summarise details on residents (e.g. 4 families/dyer, boot binder, tailor and 11 people) rather than list them one by one, the summary details were only entered, if relevant - in this case the fact that there were 4 families to the household would be relevant. But as full names were omitted in such as example, these were not entered into the table. The full statistical details on such as case were retrieved from the original census records, in order to calculate the mean number of families per household, mean Jewish density and so on.

In addition, a column of district categories was added later. This table was broken into three more manageable parts, as follows:

2.4.2 census1881Mancpp1-120

Transcription of pages 1-120

2.4.3 census1881Man121-240

Transcription of pages 121-240

2.4.4 census1881Man241-466

Transcription of pages 241-466

2.5 FOLDER: 1881 CENSUS DATA

2.5.1 LANCSAA.TXT-LANCSGU.TXT

Set of 177 files received from ESRC archive, that together comprise the entire census data for Manchester districts.

2.5.2 PRESTWICH; MANCHESTER; SALFORD; CHORLTON FOLDERS

census1881ALLManchA/B...etc.; census1881ALLPrestA/B...etc.;
census1881ALLSalfordA/B...etc.; census1881ALLChorltonA/B...etc. and
census1881ALLMan/Prestnon-Jew

This is a series of tables based on LANCSAA.TXT set (see above), whereby data on all streets in which Jews lived were copied, thus eliminating the majority of the 708,000 rows of data in the original data-sets. The tables with the 'Manch' prefix were defined by the compiler as being from that district; the same is the case with tables with the 'Prest', for Prestwich; 'Chorlton' and 'Salford'. The 'census1881ALLMan/Prestnon-Jew' file includes the streets identified in the Red Bank district, in which no Jews were found to live. This file was compiled in the same manner as above. Each row consists of one individual.

2.5.3 FOLDER: 1881 CENSUS ADDRESS DATA

census1881Manchester; census1881Prestwich; census1881Salford;
census1881Chorlton; census1881non-Jew.

This is a series of tables based on the above, which summarise the files in the above folder. Each row consists of one household.

Each row for Head of household was copied from the above. Then the number of lodgers, servants and all in each household was added. The axial number for each street was then entered and also whether it was located in the Red Bank area. Based on address1881Manchester', each household was identified as Jewish or non-Jewish, and whether it contained a sole Jewish lodger. After this extra data for Red Bank streets was entered as follows: age of eldest child, occupation of boarder, whether born abroad, whether wife and boarder born in same country. The information on occupation classifications was then entered into the file and the number of lodgers was deducted from the number of servants to create a column called 'serv-lodg' which would be the basis of calculating the mean economic index per street.

'census1881Red-BankOnly' summarises all streets for Jewish and non-Jewish within the Red-Bank district only, compiling from several of the above tables together.

2.5.4 census1881AllManch

This table parallels 'census1881Leeds', but due to the large number of households in the Manchester study, this is more limited. It is a compilation of the 5 tables described in 2.5.3, one row per household. It has the address data, number of servants, lodgers, etc. and all the spatial data, copied directly from *Manchester(table)summary*, repeated along all the households in each street.

2.6 FOLDER: OCCUPATIONS DATA

2.6.1 censusOCCUPATIONSManchester

This is a table which summarises data taken from the 1881 Census Reports, Census of England and Wales: ages, condition as to marriage and birthplaces of the people. See Her Majesty's Government (1883). The source summarises the distribution per industrial category in each urban district of which the population is over 50,000. Thus it was possible to ascertain the occupational distribution for the municipal district of Manchester. This table copies the printed table, giving the Cambridge standard classifications which match the categories used in the original reports, summing up for each industrial classification. In addition, data is given without summing up if an industry includes occupations which have differing social classes. For instance, makers and dealers (general/undefined) are split up into: shopkeeper, dealers, pawnbrokers (social class 3); and: coster-monger, street seller (social class 5).

The columns include: 'OCC. CLASS' which defines the occupational classes given in the report; 'OCC. GROUP' defines the sub-group of occupation as given in the report; 'OCC. DETAIL (examples of occupations in category)' gives detailed examples of occupation; 'Armstrong social class.' gives the social class definition of each occupation⁵; 'social class' gives the numerical equivalent of social class; 'Cambridge industrial' is the Cambridge industrial classification system of 27 categories⁶; 'males', 'females', ' Σ male&female' are the numbers given in the report for each category, Σ being the sum of the two.

Further columns analyse the data. '%of allManchester' shows the proportion of each category from all working adults in the census (total population: 341,414 less the total number in the 'Unoccupied Class' which includes children under 5 years of age': 45,922 and 'Persons returned by Property, Rank, &c., and not by special occupation': 130,265 = **165,227**). All figures taken from Her Majesty's Government (1883)), according to the formula: [Σ male&female" / 165,227 * 100]. '% of all ManchMales' shows the proportion of each category from all adult males in the census (total male population for Manchester: 163,406 less the total number of males in the 'Unoccupied Class': male children: 22,681 and male 'Persons returned by Property, Rank, &c., and not by special occupation': 35134 = **105,591**), according to the formula: [males / 105,591 * 100]. The last 2 columns 'common J. occup.'top 10 non-J', classify the occupation category that most closely fits the ten most common Jewish and non-Jewish occupations.

2.6.2 Cambridge industrial class.

This is a table which lists the 27 classes as defined by the Cambridge group. [See Cambridge (1996)].

2.6.3 distributionaloccup.

This table has one row for each Jewish occupation in the census, showing how many times each appears for heads of household. 195 rows in total.

2.6.4 denseNon-Joccup.ALL/denseNon-Joccup.

This pair of tables shows non-Jewish occupations: one row for each non-Jewish occupation in the census, only for the dense area (Red-Bank). The first table shows how each occupation was categorised. First all non-Jewish occupations were categorised, the 10 most frequent ones were identified for the latter table. The top-10 Jewish occupations were also identified amongst non-Jewish heads. 230 rows in total (the frequency distribution for these were entered in 'denseJoccup.').

The latter table takes the counts of how many Jewish heads have top-10 non-Jewish occupations and calculates the percentage of incidence of each occupation, based on 653 Jewish heads. It also shows frequency distribution for Jewish heads in non-Jewish occupations (this is taken from 'denseJoccup.ALL').

2.6.5 denseJoccup.ALL/denseJoccup.

⁵ The classification system was the same used throughout this thesis and was based on Armstrong's social classification for York, 1851. See Drake and Finnegan (1994), pp. 48-49.

⁶ The classification system parallels the system used throughout this thesis and is based on Cambridge (1996).

Like 2.6.4 above, the first table shows Jewish occupations for the Red Bank area. It takes the top-ten most common non-Jewish occupations and identifies which of the Jewish heads can be classified as such (the frequency distribution for these were entered in 'denseNon-Joccup.'). It also takes the most common Jewish occupations and identifies them amongst the Jewish heads in the same way.

The latter table summarises the frequency distribution of the ten most common Jewish occupations for the Red Bank area in the same manner as 2.6.4 above, calculating the proportion of all Jewish heads in non-Jewish occupations based on the total number of Jewish heads in the Red Bank area. It also summarises the frequency distribution of non-Jewish heads who are in top-10 Jewish occupations, based on the total number of non-Jewish heads in the Red Bank area (frequency distribution for non-Jewish heads in Jewish occupations is taken from 'denseNon-Joccup.ALL').

2.6.6 censusOCCUPATIONCambSummary/censusOCCUPATIONCambDetailed

This pair of tables summarises the totals for Cambridge occupation types for all Manchester, first by the summary classifications (i.e. A (Professional), B (Domestic) and so on) and second by the detailed classifications (i.e. E9 (INDbooks;prints;maps and so on). The latter includes columns which are summary columns of numbers per category, from the table 'censusOCCUPATIONSManchester': 'all Manchester', which generates '%allManch' using the formula - "all Manchester" / 165,227 * 100 and 'all Manchester males', which generates '%allManchmales' using the formula - "all Manchester males" / 105591 * 100"; from the table 'address1881Manchester': 'Jewish Manchester', which generates '%allJManch' using the formula - "Jewish Manchester" / 1036 * 100; from the table 'address1881Manchester', '%allJJDense', which is the frequency distribution of Cambridge, found by selecting only Red Bank streets and copying directly from the table (the system used for the previous columns could have been used here, but since counts weren't being used, was decided not to be necessary).

• 2.6.7 denseOCCUPclassificationALL

This is a table which lists all the Red Bank area occupations along with their classifications. It is based on the Red Bank area rows of the following: 'census1881Manchester'; 'census1881Prestwich'; 'census1881non-Jew' (for the latter, all the rows were included, since this table only shows Red Bank area households). 2561 rows, one for each household (including households without any occupation listed).

3. List of Leeds Statistical Tables

3.1 FOLDER: ADDRESSLISTS

This contains the statistical files on streets in which Jews lived. One row per address. Separate files for each census and one file for all censuses together.

'census1881JEWaddresses'

This file also categorises whether an address is dense/not dense and within the former area: Jewish/non-Jewish. In addition, once compilation of contextual data took place, a column was added to define whether a street had been found and if not, how many Jewish households were not found.

3.2 FOLDER: RECORD OFFICE DATA

This contains the census data copied directly from the original records at the London Record Office and copied into computerised statistical tables.

3.2.1 census 1891ALL

This is the Record Office data of all census record for all households in streets in which Jews reside. One row per address. This is similar to census 1851ALL.

3.3 FOLDER: FULL CENSUS DATA

3.3.1 FOLDER: full census1841-1891

This folder contains the summary data per household for all the censuses from 1841-1891. They show as follows: Jewish Head?; Jewish lodger; age eldest Brit. (only for Heads born abroad); no. of Heads (only in censuses from 1851, since 1841 doesn't show relationship to head); occupation of Head of households; Armstrong classification and ranking of occupation; if sole Jew, occupation of Jew; Birthplace of head; if sole Jew, birthplace of Jew; head born abroad?; number of occupied rooms (1891 only); number of lodgers/boarders, number of servants (only from 1851, since 1841 doesn't show relationship to head); employment classification, only for 1891 (employed/employer/neither); sum inhabitants; number of Jewish lodgers; address; axial number; whether in Leylands area. (census 1851full is based on census 1851ALL and census 1891full is based on census1891ALL). After this, Jewish households were identified as well as cases of sole Jews. In the latter case the number of lodgers was also entered and their occupation was also classified. Note that 1881 file is copy of 'census1881Leeds', without the streets in Leylands which have no Jews at all. Spatial values for each street were also repeated for all households in each street.

census 41-91spatialFULL

The means for the spatial values for each street for Jewish and non-Jewish heads were summarised in this table for each census in turn.

This folder also contains the following:

occupationclassif.41-91

This table summarises the occupations and classification of the top-10 most common Jewish occupations. The first series of columns lists all occupations in 1891 for Jews, Leylands area and classifies the 10 most common then lists all occupations in 1891 for non-Jewish, Leylands area and classifies the 10 most common of those. Then occurrence of top-10 Jewish occupation amongst non-Jews and vice versa is given. After this the top-10 Jewish occupations are identified for all Jewish heads in each of the six censuses. The frequency distribution for these was entered into another table: **freq.distoccupations41-91**.

3.3.2 FOLDER: summary census1841-1891

This folder contains the summary data per street for all the censuses from 1841-1891, based on the 'full' tables described above. They are based on 'Leeds(table)summary', which is the table for the 1881 census, compiled for chapters 4-5 (in the case of the 1881 table, rather than recreating it from the 'full' table, it was simply cut down). In this case less parameters are included. The following elements are included as in 'Leeds(table)summary':

The columns were created in pairs for Jewish and non-Jewish households, as follows: 'μJewHouseh', 'μHousehnon/Jew' which are the mean no. of Heads per household (this unavailable in 1841 census); 'μJewinhabit', 'μinhabitnon/Jew' are mean number of inhabitants per household; 'μageeldBritJew', 'μageeldBritnon/J' are mean age of eldest child born in Britain, only for households where Head or Wife were born abroad; 'μsocialrankJew', 'μsocialranknon-Jew' are the mean social class number (where the higher the rank, the higher the class value - households with sole Jews had the social class defined by the occupation of the *lodger*, not the head); 'ΣJewinhab', 'Σnon-Jewinhab' are the total number of inhabitants in each street (Jewish/non-Jewish - in the case of Jewish inhabitants, where they were sole lodgers, the number of Jews entered only includes the Jewish lodgers and not the non-Jewish members of the household with which they lodged); 'Σallinhab' is the sum of 'ΣJewinhab' + 'Σnon-Jewinhab'; 'ΣsoleJlodgers' is the number of Jewish lodgers living in non-Jewish households; proportion sole/J.households is the result of the formula: "ΣsoleJlodgers" / "ΣJewinhab" * 100; 'Jew.DENSITYperΣinhab' is the proportion of Jews per street, based on the number of inhabitants (the formula was: "ΣJewinhab" / "Σallinhab" x 100). '%J.H.bornabroad' is the percentage of Jewish heads or wives born abroad; '%nonJ.H.bornabroad' is the same for non-Jewish heads or wives, per street (in 1841 census, it was not possible to classify Irish born as born abroad, since these were included with Scottish born in the census, so only heads classified as 'foreign born' were included in the count of born abroad).

In addition to this the spatial data for each street are included. In the case of the files for 1841-1861,

additional set of spatial values for larger model were added as well as the spatial values for smaller model.

census41-91DENSEONLYsummary

This table took key data from each of the census summaries and put them together in one file, for Leylands streets only. Starting with the 1891 summary file, the data for each street for each other census (where that street had Jewish inhabitants) was copied into a new set of columns called, for example, %Jborn abroad1881, %Jborn abroad1871 and so on. This allowed the calculation, for example, of increments of age across streets, across time, as follows: each column of age was subtracted from the census following it, for instance the column 'age91-81' was calculated according to the formula " $\mu_{\text{ageeldBritJew1891}} - \mu_{\text{ageeldBritJew1881}}$ ". It should also be noted that due to the fact that the 1841 census did not show ages under 1, the results for this were inaccurate and indeed it is only in later censuses that a meaningful number of cases was available, since if a corresponding value did not appear in an earlier census, the later census had a blank entered against the result of the subtraction.

Another series of columns was created by subtracting density rates from consecutive censuses, for instance the column 'density 91-81' was calculated according to the formula " $\text{Jew.DENSITY}_{\text{per}\sum\text{inhab.1891}} - \text{Jew.DENSITY}_{\text{per}\sum\text{inhab.1881}}$ ". There were only 5 columns of each of these, since of course 1841 had no data for the decade preceding it.

Average rates of age difference and density difference were also calculated and created in the columns: ' $\mu_{\text{age41-91}}$ ' and ' $\mu_{\text{density41-91}}$ '. Another series of columns was created by testing if there was an increase or decrease from a census to the one following it. For instance the columns ' $\text{if91}>81\text{then1;not-0}$ ' was created according to the formula " $\text{density91-81} > 0$ ". In other words, if the density in the 91 census was greater than that in the 81 census (i.e. greater than 0), the integer 1 was inserted; if the density in the 91 census was lesser than that in the 81 census (i.e. lesser than 0, or negative), the integer 0 was inserted. Where the two censuses did not both have Jewish inhabitants at all, the row was left blank.

census41-91social

This table summarises for all six censuses, all of the social data for Leylands and non-Leylands streets in turn. Other than the following columns, most of the data were summarised from each of the six census summary tables described above. Following is an explanation of the columns whose meaning is not obvious: % J. streets is the proportion of Jewish streets from all 65 Jewish streets in Leylands. The column ' $\mu_{\text{currentcensusedenser}}$ ' is the mean value of each of the ' $\text{if91}>81\text{then1;not-0}$ ' columns in the DENSEsummary table. The column ' $\mu_{\text{densitydifference}}$ ' is the average per census of the difference in density from each census to the preceding one taken from the DENSEsummary table; i.e. the mean 'density91-81', 'density81-71' and so on. The sequence of columns for depth within The Leylands: 'Dfrom'wall', 'Leylands' and so on, were taken directly from the summary table of spatial values called 'Leeds(table)all', from where the mean depth values were calculated for each census, Leylands and non-Leylands, in turn. The columns ' $\mu_{\text{density, newly Jewish}}$ ' and ' $\mu_{\text{density, already Jewish}}$ ' give the mean density rates from 'census41-91DENSEONLYsummary' split by newly Jewish and already Jewish. Following these are a series of columns that give spatial data split calculated in the same way.

census41-91spatial

This table summarises for all six censuses, all of the spatial data for Leylands and non-Leylands streets in turn and for the two models in summary.

census 41-91spatial/dense? and census 41-91spatial/dense?

This table summarises for all six censuses, all of the spatial data for Leylands and non-Leylands streets in turn. The first table does this by repeating Leylands and outside Leylands values within the same column and the second does this by having only six rows, and repeating the columns - for example global integration appears twice: for Leylands streets in each census then for non-Leylands streets in each census.

3.3.3 FOLDER: Freedman files of J. individuals

This folder contains all the statistical files created by Murray Freedman, one for each census from 1841 to

1891, called 'census 1841JEWISH', 'census 1851 JEWISH', etc. These were originally written in Lotus 123, recompiled in Excel and then opened and saved in StatView 512.

The file for the 1881 data, called 'census 1881JEWISH' was added to once the summary tables for contextual data were created (see esp. 'census1881Leeds' below), as follows: each household entry was used to identify Jewish households in the contextual census and then information was added on whether a household had been found, or not.

3.4 FOLDER: SPATIAL DATA

3.4.1 Leeds(table)all

This is the table from the AxMan file, containing all the rows of spatial data from the axial map. It contains line length, line length in metres (a multiple of the former by 7.4142541, see summary table below), rad-rad integration [Integration(10)]. A definition for the purposes of the 1881 census has been given for: Jewish/non-Jewish street; Leylands/not Leylands. Lastly, a column defines whether the axial line is: an Irish street; a Jewish street in another census; a Jewish or non-Jewish street in the 1881 census; Jewish/non 1881 (context not found) - which are streets in the Leylands area which were identified, but whose contextual data was never found in the census; never in the Jewish census, which are all other axial lines in the map. Additional columns were then added to define for each census, which street was or was not inhabited by Jews. Also, the following depth values were added: Depth from Ghetto 'wall'⁷; Depth from most locally integrated street in The Leylands⁸; Depth from most globally integrated street in The Leylands.⁹ These were copied from 'all extra depths', a statistical table that originally compiled the three depth rates.

3.4.2 Leeds(table)summary

This is based on the *Leedstable)all* and the summary table for household data 'census1881Leeds'.

All other streets were copied, except for cases where streets had more than one axial line, where the mean spatial values per street were calculated; except line length, where the values were summed, not averaged. Line length was translated into metres by multiplying by 7.4142541 - based on the length of Byron Street which is 1000 feet/304.5 metres long. The spatial columns were then added to, with the mean radius-radius values taken straight from the AxMan table of values 'Leeds(table)rad10', as was the column of depth from the most globally integrated line and line length in pixels. In addition, a column shows whether each of the streets is located in the Leylands area of Leeds.

The remainder of the table is summaries per street for Jewish and non-Jewish households, based on 'census1881Leeds'. The columns were created in pairs for Jewish and non-Jewish households, as follows: 'μJewHouseh', 'μHousehnon/Jew' which are the mean no. of Heads per household; '%sharingJho.', '%sharingnon-Jho.' which are the percentage of households for each street which are sharing households; 'μservJew', 'μservnon/Jew' are mean no. of servants per household; 'μbo/lodgJew', 'μbo/lodgnon/Jew' are mean no. of boarders and lodgers per household; 'μserv-lodgJew', 'μserv-lodgnon/Jew' are the number of servants less the number of boarders and lodgers, averaged for all households in each street; 'μJewinhabit', 'μinhabitnon/Jew' are mean number of inhabitants per household; 'μageeldBritJew', 'μageeldBritnon/J' are mean age of eldest child born in Britain, only for households where Head or Wife were born abroad; 'μsocialrankJew', 'μsocialranknon-Jew' are the mean social class number (where 5 is Class I Professional and 1 is Class V Unskilled, so the higher the rank, the higher the class value); 'ΣJewinhab', 'Σnon-Jewinhab' are the total number of inhabitants in each street (Jewish/non-Jewish); 'Σallinhab' is the sum of 'ΣJewinhab' + 'Σnon-Jewinhab'; 'Jew.DENSITYperΣinhab' is the proportion of Jews per street, based on the number of inhabitants (the formula was: " $\frac{\Sigma \text{Jewinhab}}{\Sigma \text{allinhab}} \times 100$ "); 'ΣJewhouseh', 'Σnon/Jewhouseh' are the total number of Jewish and non-Jewish households in each street, 'ΣsoleJhouseh' gives the number of households defined as Jewish, but which only contain Jewish lodgers or boarders and the Head is non-Jewish. 'Σallhouseholds' is the total number of households in each street (Jewish/non-Jewish);

⁷Here depth was calculated from the ghetto 'wall', which was defined as all the streets that lie on the perimeter of the Leylands area, as follows: Lady Lane; North Street, Quarry Hill, Skinner Lane, Vicar Lane.

⁸Here depth was calculated from the most locally integrated street within Leylands: Regent Street.

⁹Here depth was calculated from the most globally integrated street within Leylands: Hope Street.

'Jew.DENSITYper Σ househ' is the proportion of Jews per street, based on the number of households (the formula was: " Σ Jewhouseh" / " Σ allhouseholds" x 100).

In addition there is a set of columns which summarises additional data, as follows: '%J.H.bornabroad' is the percentage of Jewish heads or wives born abroad; '%nonJ.H.bornabroad' is the same for non-Jewish heads or wives, per street; '%H/Wsamebirthp?' is the percentage of households per street in which the head and wife come from the same country of origin (only if born abroad); '%nonJ.H/Wsamebirthp?' is the same for non-Jewish households; '%Bo.samebirthp?' is the percentage of Jewish households in which the boarder or lodger shares the same country of origin as the head or wife (one was sufficient to define as sharing); '%nonJ.Bo.samebirthp?' is the same for non-Jewish households.

Two further columns were created, to take account of the 7 streets which contain households with Jews who are sole inhabitants - i.e. they are lodging in non-Jewish households. Of the 7 cases, 3 were streets where the only Jews were 'sole inhabitants'; 2 had an 1 more Jewish household, 1 had 2 more Jewish household and 1 had 20 more Jewish households. A column was created called ' Σ Jewh.w/outsole', which was the result of subtracting the total amount of sole Jewish households ' Σ soleJhouseh', from the total of all Jewish households ' Σ Jewhouseh'. This column then became the basis for calculating a Jewish density column, based on the formula: {" Σ Jewh.w/outsole" / " Σ allhouseholds" * 100}, called 'Jew.DENSITYper Σ h.w/outsole', latterly renamed as 'Jew.DENSITYper.household'. This column eliminates sole Jewish households from the calculation of density and in the 3 streets where sole Jewish households were the only Jewish households in the area, their density was redefined as 0, where in the original calculation of density, their Jewish density was found to be: 2.778, 5.556, and 16.667 (Merrion Street, Call Lane and Back Byron Street, respectively).

3.4.3 Leeds(table)Per10%band

This table summarises the table called *Leeds(table)summary*, by sorting density without sole lodgers and defining it by 10 bands of density. The mean values for each band were then entered into this table and used for scattergrams between spatial and social values.

3.4.4 census1881LeedsPerC.Leylands

This file summarises the table census1881Leeds, but only includes households within the Leylands. First selecting Jewish households in class I, copying its mean values, doing the same for Jewish class II and so on; and then doing the same for each group of non-Jewish households in each class.

3.5 FOLDER: LEEDS 1881 CENSUS

3.6.1 LEEDS1.TXT-LEEDS10.TXT

Set of 10 files received from ESRC archive, that together comprise the entire census data for Leeds districts.

3.6.2 LEEDS. COMPILED AND FED: LEEDS1.statview-LEEDS10.statview

This is a series of tables based on LEEDS.TXT set (see above), whereby data on all streets in which Jews lived were copied, thus eliminating the majority of the 176,970 rows of data in original data-sets.

3.6.3 Census1881LeedsALL1-5/Census1881LeedsALL6-10

This pair of files summarises the files in 3.6.2 - one row per person.

3.6.4 census1881Leeds

This file is based on the above, which summarise the files in the above folder. Each row consists of one household. Each row for Head of household was copied from the above. After this extra data was entered as follows: age of eldest child, whether born abroad, whether wife and boarder born in same country. Then the number of lodgers, servants and all in each household was added. The axial number for each street was then

entered and also whether it was located in the Leylands area. Based on 'census 1881JEWISH', each household was identified as Jewish or non-Jewish, and whether it contained a sole Jewish lodger. The information on social class based on occupation was then entered into the file and the number of lodgers was deducted from the number of servants to create a column called 'serv-lodg' which would be the basis of calculating the mean economic index per street.

The table also includes all the spatial data copied from the table 'Leeds(table)summary', repeated along all the households in each street.

3.6.5 census1851LEEDS

This contains one row per street in the census. This contains compilations of census data with added spatial data. Further compilations are made for economic data (based on census information).

3.6.6 census1891LEEDS

This contains one row per street (179 streets). It is a summary of 'census 1891ALL+JEWISH'. It contains the following columns: number of households in street; number of Jewish households in street; mean number of heads per household, per street; mean social rank per household, per street; mean age of eldest child per household, per street. The last five columns are repeated again only for non-Jewish households in each street then only for Jewish households in each street. Lastly, the sum of inhabitants in each street and the sum of Jewish inhabitants in each street are given.

APPENDIX B

Glossary¹⁰

ASCAMA (pl. ASCAMOT)	One of the civil laws of the Congregation
ASHKENAZI (pl. ASHKENAZIM)	Jew originating in eastern or central Europe. They differ from the SEPHARDIM in their modes of prayer and pronunciation of Hebrew. Their vernacular is YIDDISH.
BARMITZVAH	Traditional ceremony of acceptance when a boy attains his religious majority at the age of thirteen.
BETH DIN	A court of at least three members, administering Jewish law; in modern times, a Jewish ecclesiastical court.
BETH MIDRASH	Theological College; literally House of Study. Occasionally also associated with a small house of worship.
CHAZAN (also HAZAN; pl. CHAZANIM)	Cantor, Reader
CHEDER	Hebrew School
CHEVRA (pl. CHEVROT, CHEVROTH, CHEVRAS)	Social or voluntary association for religious purposes often forming the congregation of a small, independent synagogue. Occasionally also charitable. See Webb, B. in Englander, 1994, p. 198: 'For the most part the religious-minded form themselves into associations (Chevras), which combine the functions of a benefit club for death, sickness and the solemn rites of mourning with that of public worship and the study of the Talmud.
GREENERS	Newcomers
HALACHA	The whole of Jewish law or a specific rule. Especially the accepted traditional interpretation of the Written Law.
HOLYDAYS	Period covering early autumn festivals: Jewish New Year, YOM KIPPUR (Day of Atonement), Tabernacles, (SUCCOT) and Festival of the Rejoicing of the Law (SIMCHAT TORAH).
JUDISCH	(SEE YIDDISH)
KADISH	Prayer recited by mourners.
KOSHER	Ritually approved (usually, of food). KASHRUT refers to the set of laws.
LADINO	Judæo-Spanish, spoken by SEPHARDI Jews.
LANDSMANN, pl. LANDSLEIT	Person or people from the same village or region, usually of Central or Eastern Europe. Literally: fellow-countryman.
LANDSMANN(SCHAFT)	A person from a particular town or district (or organisation of...)
LANZLARD	Fellow townsmen
MAHAMAD	The governing body of a Sephardi Congregation.
MARRANO	A forced convert from Judaism or his descendant, who practices Judaism in secret.
MIKVA(H) (pl. MIKVOT)	Ritual bath.

¹⁰This glossary is based on the following: Englander, D. (1994) *A Documentary History of Jewish Immigrants in Britain 1840-1920*; Leicester, Leicester University Press, p. 361; and Williams, B. (1985) *The Making of Manchester Jewry 1740-1875*; Manchester, Manchester UP, pp. 432-433.

MINYAN (pl. MINYANIM)	A quorum of ten males necessary for public worship.
SEPHARDI (pl. SEPHARDIM)	Jew originating from Spain or Portugal.
SHECHITA	The ritual slaughter and preparation of meat for consumption by Jews.
SCHLEP, SHLEP	Yiddish, from German schleppen: to drag or lug (oneself or an object) with difficulty.
SHTETL	East European village.
SHOOL, SHUL, SCHUL	Ashkenazi (YIDDISH) term for synagogue. From High German <i>scuola</i> , meaning school.
STIEBL (pl. STIEBLACH)	Small synagogue.
TALMUD TORAH (pl. TALMUDEI TORAH)	(lit. Study of the Law) Religious and Hebrew school, usually for added education for children who learn in secular schools.
YESHIVA(H) (pl. YESHIVOT)	Academy for higher Jewish Learning.
YIDDISH	A type of old German formed from many languages, especially Hebrew, spoken by ASHKENAZI Jews. JUDISCH - German word for YIDDISH. Yiddish is written with Hebrew characters.

Epilogue to PhD Dissertation

• Preamble

The Examination of this thesis took place on 2 July 1999 and was conducted by Professor Tom Markus, Strathclyde University and Dr Anne Kershen, Queen Mary and Westfield College, University of London. During the examination, various points were raised by the examiners and were discussed with the writer of this thesis. It was decided that the points in question had been clarified by the discussion which took place during the examination between the examiners and the candidate, and that the thesis would benefit from a summary of the discussion in the form of an epilogue, written by the author of this thesis in consultation with the examiners. In addition, it was recognised that it would be of interest to readers of this thesis to know about ideas for future work that might emerge from the research reported here. Following are four points for clarification, after which is a review of several research ideas which have emerged from this work.

1. Points for Clarification

1.1 Human experience of 'ghettos'.

Whilst considering the statistics used in this thesis, it seemed evident that there might be a need to point out that as well as being a measurable phenomenon, human experience of life in areas of the city such as the Leylands in Leeds and Red Bank in Manchester would have had tangible qualities that no amount of statistical analysis can depict. It was however noted that it was possible to map contemporary minority settlement (lacking in detailed data, such as census reports), through such means as counting the numbers of people wearing 'ethnic' garb; by plotting the location of cultural institutions, plotting the distribution of streets signs in the foreign language of the community in question or even noting the extent of the area in which newspapers aimed at the minority group in question are sold or where food catering for the community in question is sold (such as Afro-Caribbean vegetables for that community).

Nineteenth century descriptions of Jewish settlement patterns are numerous and some of the authors quoted in this thesis are exemplars of writing about Jewish settlement. Following are two descriptions of the Jewish East End of London in the late 19th century that exemplify the manner in which it is possible to convey the sight, smell and sound that make it possible to 'map' minority settlement. 'Whitechapel is a veritable... Eldorado of the East, a gathering together of poor fortune seekers; its streets are full of buying and selling, the poor living on the poor. Here, just outside the old City walls have always lived the Jews, and here they are now in thousands, both old established and new comers, seeking their livelihood... the neighbourhood of old Petticoat Lane on Sunday is one of the wonders of London, a medley of strange sights, strange sounds, and strange smells. Streets crowded so as to be thoroughfares no longer, and lined with a double or treble row of hand-barrows, set fast with empty cases, so as to assume the guise of market stalls...those who have something showy, noisily push their trade, while the modest merit of the utterly cheap makes its silent appeal from the lower stalls... Many, perhaps most, things of the "silent cheap" sort are bought in the way of business; old clothes to renovate, old hinges and door-handles to be furbished up again... Other stalls supply daily wants - fish is sold in large quantities - vegetables and fruit - queer cakes and outlandish bread.' [Booth (1902), pp. 66-67].

'There is no difficulty in naming the prevailing type in Aldgate and Whitechapel High Street - olive skin, dark hair, hook nose [sic]. Here the Jews predominate... Wentworth Street is almost impassable for its stalls and chafferers. Save for its grime, it is impossible to believe it in England and within a few minutes of the Bank. The faces are foreign; the clothes are foreign, nearly all the women being wrapped in dark red shawls; the language is largely foreign, Yiddish being generally known here; and many of the articles on the stalls are foreign - from pickled fish and gherkins to scarves of brilliant hue'. [Lucas, E. V. (1906) *A Wanderer in London* (1924 edition); London, Methuen & Co., p. 164-5.]

Both these accounts encapsulate the sense of life in the London settlement. The lack of similarly rich descriptions of Jewish settlement in Manchester and Leeds points to the paucity of description about Jewish life there and indeed the paucity of research into patterns of settlement in these cities, although as pointed

out in this thesis, there are sources that prove that contemporary observers saw Jewish settlement in the two cities as a 'ghetto.'¹¹

1.2 Place and Space.

In a review of theories regarding society and space, it is written above (on page 31) the following: 'Theories regarding social solidarity tend to be divided into those that suggest that in the modern city man is free from ties related to place, and those that suggest that social ties are transpatial (independent of space), due to the individual's multiple membership of communities.' The discussion of this paragraph during the examination of this thesis led to the conclusion that it does not clearly point out the distinction to be made between 'space' and 'place'.

Doreen Massey (1994), in her collection of writings entitled 'Space, Place and Gender', suggests that a possible distinction is to be made between space = masculine/place = feminine, leading to a global/local distinction¹². However, Massey points out that these distinctions are too rigid to be relied upon, writing that the distinction between the two concepts is one made currently as part of the idealisation of a time when 'places' were 'inhabited by coherent and homogenous communities' even though "'place" and "community" have only rarely been coterminous'.¹³

The concept underlying the writings about space in this thesis tend more towards that proposed by Giddens (1990)¹⁴, (although also using the global/local to explain the difference between space and place) stating that the difference is one of distance and time whereby pre-industrial societies have a congruence between place and space - i.e. the individual's social relations overlap in a locality; whilst industrial societies have a multiple sets of relationships, some of which occur on a daily basis and others occur on occasion - i.e. the individual's social relations are the outcome of membership of many different social groups, some of which are tied to space and some of which overcome space.

This thesis contends, after Hillier and Hanson (1984), that society always has a spatial dimension and that the only way to understand the form of society is by describing it.¹⁵

1.3 Categorisation of occupations according to the Armstrong method.

This thesis used Armstrong classifications of class to categorise occupations reported in the census. It was noted above (see page 73) that Armstrong's methods are constrained by the fact that his Class III tends to include a large number of occupations, and it should be further noted that some might be considered semi-skilled by other systems. This problem was considered here by the use of later additions to the Armstrong system that take into account the number of people employed.¹⁶

Dr Kershen points out that when analysing the occupations of people working in the tailoring industry, sub-division of the category of tailoring might shed further light on the economic attainments of the Jewish population of the settlements considered here and would clarify whether a distinction can be made between economic status and social status.¹⁷ Such sub-division would look at the specific class of tailoring work (e.g. 'machiner', 'presser', 'cutter', 'tailor' and 'master tailor') and by using available data, such as Beatrice Potter's 'Table of Class of Work and Wages'¹⁸, would downgrade some of the people considered 'Class III Skilled' by Armstrong to 'Class IV Semi-Skilled' according to their estimated wages. Consideration of

¹¹See Tomlinson (1885), p. 49 and Poilishe Yidel, 25 July 1884 in Kershen (1995), p. 39.

¹²Massey, D. B. (1994) *Space, Place and Gender*, Cambridge, Polity, pp. 9-10.

¹³op. cit. p. 147.

¹⁴Giddens, A. (1990) *The Consequences of Modernity*, Cambridge, Polity, p. 18, quoted in Massey (1994).

¹⁵See Hillier and Hanson (1984), p. 26.

¹⁶The 1878 Factory Act changed the definition of factory as a workshop employing more than 50, to one based on whether a workshop used power. This further exemplifies how confusion could arise with regards this issue.

¹⁷See above, pp. 36-37: 'The outsider's choice of residential location is the outcome of stratification by status, normally allied to economic restrictions'.

¹⁸See: Booth, C. (1890-2) *Life and Labour of the People in London*; London, Macmillan. Volume IV, pp. 37-68 and Potter, B. (1888) 'Report to the Board of Trade on the Sweating Industry in Leeds' *Nineteenth Century*; XXIV (138) (August 1888): pp. 161-84. Further sources suggested are Fishman (1975).

income (or rents) is a method recommended by Higgs (1996)¹⁹. This recalculation might still suffer from the possibility that some workers entered their occupation in the census as 'tailor', even if their occupation was of a less skilled nature.

It should further be noted that notions of 'employed' and 'unemployed' used here in the analysis hide the fact that some of the work patterns of the community in question were subject to the seasonality of the tailoring industry. In addition, there were many examples of sub-contracted labour within the workshop; for example the presser could be sub-contracting to an under-presser within the same workshop and call himself 'employer'. However, it was the actual numbers of employed that gave veracity to the results reported here.

1.4 The use of Yiddish by contemporary Jewry.

Chapter Nine above states: '... since Jewish culture is linked transpatially by a common language of prayer, and in many cases also by a common vernacular (Yiddish among Ashkenazi Jews and Ladino among Sephardic), any Jew visiting another from abroad would be capable of using his cultural knowledge as an entry point into the local Jewish society.' This statement refers specifically to pre-20th century Jewry. It should be noted that the use of Yiddish as an every-day language has become less common in the latter half of the 20th century (although there has been a renaissance of academic study of the language in Europe, America and Israel in recent years). Ladino was not commonly a lingua franca for the Sephardic Jews of England to the extent that Yiddish was to the Ashkenazi, although it was the 'colloquial speech' for some, according to Raphael (1985)²⁰.

2. Research Ideas which have Emerged from this Work

This thesis is to be viewed as both a summary of research completed and as a starting point for future research into patterns of settlement. It is hoped that this work has shown that it is possible to use methods from both Architecture and Human Geography in order to investigate subjects that are of interest in both those fields. Indeed, this work has shed light on matters of interest in other fields too, such as Jewish History and Industrial History. Following are a couple of routes that the work reported in this thesis might take in the future.

2.1 Analysis of the Impact of Sub-Contracting on Patterns of Settlement

Further research which could emerge from this thesis might include detailed analysis of the spatial impact of a specific factory or workshop on the choice of domicile for its employees²¹, Dr Kershen suggests that there was likely to have been a relationship between the growth of men's wholesale clothing manufacture in Leeds and the creation of clusters of settlement in certain areas²².

Further analysis of the distribution pattern of sub-contracted work and the relationship between these and the organisation of workers into unions might make a valuable contribution to the understanding of 19th century patterns of employment. Indeed, such a subject has relevance today, where both at the unskilled blue-collar part of the market-place and at the skilled white-collar part, the concept of out-working is showing a resurgence, so the issue of job description is likely to become even more complex.

2.2 Statistical methods

It should be noted that the research done for this thesis employs methods of statistical analysis, such as univariate frequency distribution and bivariate regression analysis, which look at variables singularly and in

¹⁹See Higgs (1996), pp. 137-138. Higgs points out that Armstrong's system 'can only be used with any degree of confidence for the 30 year period from 1851 to 1881' [inclusively], since the earlier and later censuses do not provide sufficient information on number of people employed.

²⁰See Raphael, C. (1985) *The Road from Babylon: The Story of Sephardi and Oriental Jews*; London, Weidenfeld & Nicolson, p. 177.

²¹See also Kershen (1995).

²²Such as John Barran in Park Place and Herman Friend in Templar Street.

pairs. It was agreed during the examination that the data collated here would benefit from multi-variate statistical analysis, such as regression analysis using multiple variates, stepwise regression and possibly also factor analysis. It was suggested that such analysis would be likely to add to the strength of the argument presented and might create valuable leads. Multiple variate analysis would enable testing of the data for interrelationships between the various social measures and their relationship in turn with the spatial measures. This would also enable testing of the relative importance of each of the social measures, when considering the spatialisation of Jewish settlement. It was further proposed that such analysis could lead to a singular measure of 'ghettoisation'.

2.3 Analysis of detailed location of communal institutions and organisations

This thesis concentrated on settlement in Leeds and Manchester, where records on communal institutions were not made or were not kept as stringently as in London²³. Records of communal institutions, such as *steibels* and *chevrot*, could be used in other cases to map the internal spatial structure of the community (and parallel institutions for other minority groups would of course serve the same purpose). This type of analysis was applied with regards the Jewish community of the East End of London in the MSc thesis of the author [see Vaughan (1994)] and has been done for a contemporary Jewish community in Dublin by Waterman (1981), among other examples.

LV/170799

²³Some records were made, but many were lost due to neglect in subsequent years, see Williams, B. (1992) 'Heritage and Community: the rescue of Manchester's Jewish Past' in *The Jewish Heritage in British History*; Ed. Kushner, T. London, Frank Cass, pp. 128-146.